

Verification of Conformity

No. ESTS-P22051708

The following products have been tested by us with the listed standards and found in compliance with the council Low Voltage Directive 2014/35/EU. It is possible to use CE marking to demonstrative for the compliance with this Directive.

Applicant : Zhuhai Gotech Intelligent Technology Co., Ltd.
Address : 66 Yongda Road, Hongqi Town, Jinwan District, 519090 Zhuhai, P.R.China
Product : Door Bell
Trade Mark : STAVIX
Model No. : For Door Bell: MD7L, MD7LA, MD7LB, MD8L, MD8LA, MD9L
: For AC plug indoor machine and USB plug indoor machine: Dingdong

Test Standards:	
EN 62368-1:2014+A11:2017	Audio/video, information and communication technology equipment Part 1: Safety requirements

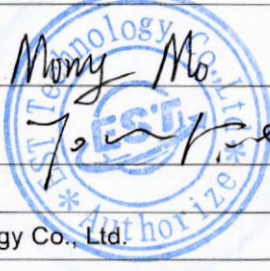



EST Technology Co., Ltd.

Http://www.gdest.cn; Tel: +86 769-83081888

Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China

The statement is based on a single evaluation of one sample of above mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab's logo.

TEST REPORT EN 62368-1 Audio/video, information and communication technology equipment Part 1: Safety requirements	
Report reference No.:	ESTS-P22051708
Tested by.....: (printed name and signature)	Morry Mo 
Approved by.....: (printed name and signature)	Tom Nie 
Date of issue.....:	2022-07-28
Testing laboratory	EST Technology Co., Ltd.
Address.....:	Chilingxiang, Qishantou, Santun, Houjie, Dongguan, Guangdong, China
Test location.....:	Same as above
Applicant.....:	Zhuhai Gotech Intelligent Technology Co., Ltd.
Address.....:	66 Yongda Road, Hongqi Town, Jinwan District, 519090 Zhuhai, P.R. China
Manufacturer.....:	Same as applicant.
Address.....:	Same as applicant.
Standards.....:	EN 62368-1:2014+A11:2017
Test Procedure	LVD
Non-standard test method.....:	N/A
Type of test equipment	Door Bell
Trade mark(s).....:	STAVIX
Model/Type designation.....:	See page 7
Rating.....:	For Door Bell: Input: 5V $\overline{\text{---}}$ 1A For AC plug indoor machine: Input: 100~240Vac 50/60Hz 0.5A MAX For USB plug indoor machine: Input: 5V $\overline{\text{---}}$ 1A
TRF originator.....:	EST Technology Co., Ltd.
Copyright blank test report:	EST Technology Co., Ltd.
Test item particulars:	--
Equipment mobility	Movable (For All machine) direct plug-in (For AC plug indoor machine)
Operating Condition	Continuous
Tested for IT power systems	No
Class of equipment	Class III equipment for Door bell and USB plug indoor machine Class II equipment For AC plug indoor machine
Mass of equipment (kg)	For Door Bell:0.220Kg For AC plug indoor machine unit:0.059Kg For USB plug indoor machine unit:0.029Kg
Protection against ingress of water	IPX0

List of Attachments (including a total number of pages in each attachment):

- Attachment 1 (09 pages) – National differences
- Attachment 2 (11 pages) – Photo Documentation
- Attachment 3 (07 pages) – Plug test Documentation

Summary of testing:

See below for summary and applicable clauses.

All tests were conducted under maximum normal load conditions as below, if not specified elsewhere.

Tests performed (name of test and test clause):

Refer to content of this test report, see the chapters in detail.

Testing location:

EST Technology Co., Ltd.

Chilingxiang, Qishantou, Santun, Houjie,
Dongguan, Guangdong, China

Summary of compliance with National Differences:

EU group differences

The product fulfils the requirements of EN 62368-1:2014+A11:2017.

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

For Door bell



For AC plug indoor machine**For USB plug indoor machine**

Remark:

1. There are representative marking labels, the markings label for other models are identical to them except for the model name.
2. The above markings are the minimum requirements by the safety standard. For the final production samples, additional markings which do not give rise to misunderstanding may be added.
3. When this apparatus is vended to Europe, the CE marking, WEEE symbol, manufacture/import mane and address should be added in the making plate, at the same time, The CE marking and WEEE symbol should be at least 5.0mm and 7.0mm respectively in height.
4. The mfr. and importer's name and address should be printed on label,if not possible can be printed onpackage or a document accompanying the equipment.



TEST ITEM PARTICULARS:	
Classification of use by.....:	<input checked="" type="checkbox"/> Ordinary person <input type="checkbox"/> Instructed person <input type="checkbox"/> Skilled person <input checked="" type="checkbox"/> Children likely to be present
Supply Connection.....:	<input checked="" type="checkbox"/> AC Mains For AC plug indoor machine <input type="checkbox"/> DC Mains <input checked="" type="checkbox"/> External Circuit - not Mains connected For Door Bell and USB plug indoor machine <input checked="" type="checkbox"/> ES1 <input type="checkbox"/> ES2 <input type="checkbox"/> ES3
Supply % Tolerance	<input checked="" type="checkbox"/> +10%/-10% For AC plug indoor machine <input type="checkbox"/> +20%/-15% <input type="checkbox"/> + ___ %/- ___ % <input checked="" type="checkbox"/> None For Door Bell and USB plug indoor machine
Supply Connection – Type	<input checked="" type="checkbox"/> pluggable equipment type A <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input checked="" type="checkbox"/> direct plug-in For AC plug indoor machine <input type="checkbox"/> mating connector <input type="checkbox"/> pluggable equipment type B <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input type="checkbox"/> permanent connection <input type="checkbox"/> mating connector <input checked="" type="checkbox"/> other: not directly connected to the mains For Door Bell and USB plug indoor machine
Considered current rating of protective device as part of building or equipment installation.....:	N/A Installation location: <input checked="" type="checkbox"/> building <input type="checkbox"/> equipment
Equipment mobility.....:	<input checked="" type="checkbox"/> movable (For Door Bell and USB plug indoor machine) <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input checked="" type="checkbox"/> direct plug-in (For AC plug indoor machine) <input type="checkbox"/> rack-mounting <input type="checkbox"/> wall-mounted
Over voltage category (OVC)	<input type="checkbox"/> OVC I <input checked="" type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input type="checkbox"/> other: _____
Class of equipment	<input type="checkbox"/> Class I <input checked="" type="checkbox"/> Class II For AC plug indoor machine <input checked="" type="checkbox"/> Class III For Door Bell plug indoor machine
Access location	<input type="checkbox"/> restricted access location <input checked="" type="checkbox"/> N/A
Pollution degree (PD)	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
Manufacturer's specified maximum operating ambient:	50°C
IP protection class	<input checked="" type="checkbox"/> IPX0 <input type="checkbox"/> IP _____
Power Systems	<input checked="" type="checkbox"/> TN <input type="checkbox"/> TT <input type="checkbox"/> IT ___ V L-L
Altitude during operation (m)	<input checked="" type="checkbox"/> 2000 m or less <input type="checkbox"/> 5000 m
Altitude of test laboratory (m)	<input checked="" type="checkbox"/> 2000 m or less <input type="checkbox"/> _____ m



Mass of equipment (kg)	For Door Bell:0.220Kg For AC plug indoor machine:0.059Kg For USB plug indoor machine:0.029Kg
------------------------------	--



POSSIBLE TEST CASE VERDICTS:	
- test case does not apply to the test object..... :	N/A
- test object does meet the requirement..... :	P (Pass)
- test object does not meet the requirement..... :	F (Fail)
TESTING:	
Date of receipt of test item..... :	2022-05-17
Date (s) of performance of tests..... :	2022-05-18 to 2022-05-30
GENERAL REMARKS:	
<p>"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.</p>	
Name and address of factory (ies)..... :	1. Zhuhai Gotech Intelligent Technology Co., Ltd. 2 jinliang Road, Hongqi Town, Jinwan District, Zhuhai 519090 P.R.China
GENERAL PRODUCT INFORMATION:	
Product Description: <ol style="list-style-type: none"> The product covered in the report is a Door Bell . The test samples are pre-production sample without serial numbers. Specified maximum ambient temperature is 50°C. The AC plug indoor machine which is considered as PS3 circuits.The doorbell and USB plug indoor machine is considered to be powered by PS1. The equipment was evaluated for a maximum operating altitude of 2000m. Clearance values have been evaluated for an operating altitude of max. 2000 meters, based on Table 17 altitude adjustment factor 1.0. 	
Model list: For Door Bell: MD7L, MD7LA, MD7LB, MD8L, MD8LA, MD9L For AC plug indoor machine and USB plug indoor machine: Dingdong	
Model different: For Door Bell: All these models are same as each other only except for the model name	

**ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:**

(Note 1: Identify the following six (6) energy source forms based on the origin of the energy.)

(Note 2: The identified classification e.g., ES2, TS1, should be with respect to its ability to cause pain or injury on the body or its ability to ignite a combustible material. Any energy source can be declared Class 3 as a worse case classification e.g. PS3, ES3.

Electrically-caused injury (Clause 5):

(Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source classification)

Example: +5 V dc input

ES1

Source of electrical energy**Corresponding classification (ES)****For Door bell**

All internal circuit

ES1

For USB plug indoor machine

All internal circuit

ES1

For AC plug indoor machine

All internal circuit except for output circuit

ES3

output circuit(consists speaker circuit)

ES1

Electrically-caused fire (Clause 6):

(Note: List sub-assembly or circuit designation and corresponding energy source classification)

Example: Battery pack (maximum 85 watts):

PS2

Source of power or PIS**Corresponding classification (PS)****For Door bell**

All internal circuit

PS1

Battery cell pin + to pin -

PS1

For USB plug indoor machine

All internal circuit

PS1

For AC plug indoor machine

All internal circuit except for output circuit

PS3

output circuit(consists speaker circuit)

PS1

Injury caused by hazardous substances (Clause 7)

(Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.)

Example: Liquid in filled component

Glycol

Source of hazardous substances**Corresponding chemical**

N/A

N/A

Mechanically-caused injury (Clause 8)

(Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.)

Example: Wall mount unit

MS2

Source of kinetic/mechanical energy**Corresponding classification (MS)**

Sharp edges and corners

MS1

Equipment mass

MS1

Wall mount unit for Door bell(Equipment mass <1 kg, mounted < 2m)

MS1



ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:

Thermal burn injury (Clause 9)
 (Note: Identify the surface or support, and corresponding energy source classification based on type of part, location, operating temperature and contact time in Table 38.)
 Example: Hand-held scanner – thermoplastic enclosure TS1

Source of thermal energy	Corresponding classification (TS)
Accessible surface	TS1
Internal circuits	TS3

Radiation (Clause 10)
 (Note: List the types of radiation present in the product and the corresponding energy source classification.)
 Example: DVD – Class 1 Laser Product RS1

Type of radiation	Corresponding classification (RS)
LED lamp for Door Bell camera	RS1

ENERGY SOURCE DIAGRAM

Indicate which energy sources are included in the energy source diagram. Insert diagram below

ES PS MS TS RS
 (refer to ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE for DETAIL)

OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	Possible Hazard			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
For Door bell				
Ordinary	ES1: All internal circuit	N/A	N/A	N/A
For USB plug indoor machine				
Ordinary	ES1: All internal circuit	N/A	N/A	N/A
For AC plug indoor machine				
Ordinary	ES3: The circuit connected to a.c. mains	N/A	N/A	Enclosure, See 5.4.2, 5.4.3
Ordinary	ES1: Output circuit	N/A	N/A	N/A
6.1	Electrically-caused fire			
Material part (e.g. mouse enclosure)	Energy Source (PS2: 100 Watt circuit)	Safeguards		
		Basic	Supplementary	Reinforced
For Door bell				
Enclosure	PS1 circuit	N/A	N/A	N/A
PCB	PS1 circuit	N/A	N/A	N/A
The other components/materials	PS1 circuit	N/A	N/A	N/A
Internal/external wiring	PS1 circuit	N/A	N/A	N/A
Internal Li-ion battery pack supply wire	PS1 circuit	N/A	N/A	N/A
For USB plug indoor machine				
Enclosure	PS1 circuit	N/A	N/A	N/A
PCB	PS1 circuit	N/A	N/A	N/A
The other components/materials	PS1 circuit	N/A	N/A	N/A
For AC plug indoor machine				
Enclosure	PS3 circuit	See 6.3	V-0	N/A
PCB	PS3 circuit	See 6.3	V-1 or better	N/A
The other components/materials	PS3 circuit	See 6.3	See 6.4.5, 6.4.6	N/A
Internal/external wiring	PS3 circuit	See 6.3	See 6.5	N/A
7.1	Injury caused by hazardous substances			
Body Part (e.g., skilled)	Energy Source (hazardous material)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part	Energy Source	Safeguards		



(e.g. Ordinary)	(MS3:High Pressure Lamp)	Basic	Supplementary	Reinforced (Enclosure)
Ordinary	MS1: Sharp edges and corners	N/A	N/A	N/A
Ordinary	MS1: Equipment mass	N/A	N/A	N/A
Ordinary	MS1: Wall mount unit for Door bell	N/A	N/A	N/A
9.1	Thermal Burn			
Body Part (e.g., Ordinary)	Energy Source (TS2)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	TS3: Internal circuits	N/A	N/A	Enclosure
Ordinary	TS1: Accessible surface	N/A	N/A	Enclosure
10.1	Radiation			
Body Part (e.g., Ordinary)	Energy Source (Output from audio port)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	RS1: LED lampfor Door Bell camera	N/A	N/A	N/A

Supplementary Information:

(1) See attached energy source diagram for additional details.

(2) "N" – Normal Condition; "A" – Abnormal Condition; "S" Single Fault

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2	P
4.1.2	Use of components	Components which are certified to IEC and/or national standards are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment. See also Annex G.	P
4.1.3	Equipment design and construction	Evaluation of safeguards regarding preventing access to ES3 parts, limiting the source supplying outputs to fulfill ES1.	P
4.1.15	Markings and instructions.....:	(See Annex F)	P
4.4.4	Safeguard robustness		P
4.4.4.2	Steady force tests.....:	(See Annex T.4, T.5)	P
4.4.4.3	Drop tests.....:	1000m for AC plug indoor machine	P
4.4.4.4	Impact tests	(See Annex T.6)	P
4.4.4.5	Internal accessible safeguard enclosure and barrier tests.....:		N/A
4.4.4.6	Glass Impact tests.....:		N/A
4.4.4.7	Thermoplastic material tests.....:	(See Annex T.8)	P
4.4.4.8	Air comprising a safeguard.....:	See Annex T	P
4.4.4.9	Accessibility and safeguard effectiveness		P
4.5	Explosion		P
4.6	Fixing of conductors		P
4.6.1	Fix conductors not to defeat a safeguard		P
4.6.2	10 N force test applied to	(See Annex T.2)	P
4.7	Equipment for direct insertion into mains socket – outlets	See below	P
4.7.2	Mains plug part complies with the relevant standard.....:	The dimension and construction of the injection part of plug is in accordance with: For European plug: EN 50075.	P
4.7.3	Torque (Nm).....:	0.027Nm Max.	P
4.8	Products containing coin/button cell batteries	No coin/button batteries.	N/A
4.8.2	Instructional safeguard		N/A
4.8.3	Battery Compartment Construction		N/A
	Means to reduce the possibility of children removing the battery.....:		—

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.8.4	Battery Compartment Mechanical Tests..... :		N/A
4.8.5	Battery Accessibility		N/A
4.9	Likelihood of fire or shock due to entry of conductive object..... :	(See Annex P)	P

5	ELECTRICALLY-CAUSED INJURY (Consider AC plug indoor machine only.)		P
5.2.1	Electrical energy source classifications..... :	(See appended table 5.2)	P
5.2.2	ES1, ES2 and ES3 limits		P
5.2.2.2	Steady-state voltage and current..... :	(See appended table 5.2)	P
5.2.2.3	Capacitance limits..... :		N/A
5.2.2.4	Single pulse limits..... :		N/A
5.2.2.5	Limits for repetitive pulses..... :		N/A
5.2.2.6	Ringling signals		N/A
5.2.2.7	Audio signals		N/A
5.3	Protection against electrical energy sources		P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons		P
5.3.2.1	Accessibility to electrical energy sources and safeguards		P
5.3.2.2	Contact requirements	No opening	P
	a) Test with test probe from Annex V..... :		N/A
	b) Electric strength test potential (V)..... :		N/A
	c) Air gap (mm)		N/A
5.3.2.4	Terminals for connecting stripped wire		N/A
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material		P
5.4.1.3	Humidity conditioning..... :	(See sub-clause 5.4.8)	P
5.4.1.4	Maximum operating temperature for insulating materials	(See appended table 5.4.1.4)	P
5.4.1.5	Pollution degree..... :	2	—
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A
5.4.1.5.3	Thermal cycling		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage		N/A
5.4.1.9	Insulating surfaces		P
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		P

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.10.2	Vicat softening temperature..... :		N/A
5.4.1.10.3	Ball pressure :	1.1mm for AC plug indoor machine	P
5.4.2	Clearances		P
5.4.2.2	Determining clearance using peak working voltage	(See appended table 5.4.2.2)	P
5.4.2.3	Determining clearance using required withstand voltage :	(See appended table 5.4.2.3)	P
	a) a.c. mains transient voltage..... :	2500 Vpeak	—
	b) d.c. mains transient voltage :	N/A	—
	c) external circuit transient voltage..... :	N/A	—
	d) transient voltage determined by measurement :	N/A	—
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A
5.4.2.5	Multiplication factors for clearances and test voltages..... :	1.0	P
5.4.3	Creepage distances..... :	(See appended table 5.4.3)	P
5.4.3.1	General		P
5.4.3.3	Material Group :	IIIb	—
5.4.4	Solid insulation		P
5.4.4.2	Minimum distance through insulation :	(See appended table 5.4.4.2)	P
5.4.4.3	Insulation compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements		N/A
5.4.4.6.2	Separable thin sheet material		N/A
	Number of layers (pcs) :		N/A
5.4.4.6.3	Non-separable thin sheet material		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material..... :		N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz..... :		N/A
5.4.5	Antenna terminal insulation		N/A
5.4.5.1	General		N/A
5.4.5.2	Voltage surge test		N/A
	Insulation resistance (MΩ)..... :	Measured 100MΩ between mains supply to output terminals.	—

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.6	Insulation of internal wire as part of supplementary safeguard..... :		N/A
5.4.7	Tests for semiconductor components and for cemented joints	Certified optocouplers used.	N/A
5.4.8	Humidity conditioning		P
	Relative humidity (%)..... :	93%	—
	Temperature (°C) :	40°C	—
	Duration (h) :	120 hours	—
5.4.9	Electric strength test..... :	(See appended table 5.4.9) Electric strength tests were conducted after 5.4.8 humidity conditioning test for each manufacturer source in table 4.1.2.	P
5.4.9.1	Test procedure for a solid insulation type test		P
5.4.9.2	Test procedure for routine tests		N/A
5.4.10	Protection against transient voltages between external circuit		N/A
5.4.10.1	Parts and circuits separated from external circuits		N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test..... :		N/A
5.4.10.2.3	Steady-state test..... :		N/A
5.4.11	Insulation between external circuits and earthed circuitry..... :		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage U_{op} (V)..... :		—
	Nominal voltage U_{peak} (V)..... :		—
	Max increase due to variation U_{sp} :		—
	Max increase due to ageing ΔU_{sa} :		—
	$U_{op} = U_{peak} + \Delta U_{sp} + \Delta U_{sa}$:		—
5.5	Components as safeguards		
5.5.1	General		N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.1	General requirement		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector..... :		N/A
5.5.3	Transformers		N/A
5.5.4	Optocouplers		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.5.5	Relays		N/A
5.5.6	Resistors		N/A
5.5.7	SPD's	No such component provided	N/A
5.5.7.1	Use of an SPD connected to reliable earthing	No such construction.	N/A
5.5.7.2	Use of an SPD between mains and protective earth	No such construction.	N/A
5.5.8	Insulation between the mains and external circuit consisting of a coaxial cable..... :		N/A
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements		N/A
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm ²) :		—
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm ²)..... :		—
	Protective current rating (A) :		—
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
	Conductor size (mm ²), nominal thread diameter (mm)..... :		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective system		N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method Resistance (Ω)..... :		N/A
5.6.7	Reliable earthing		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		P
5.7.2	Measuring devices and networks		P
5.7.2.1	Measurement of touch current..... :	0.240mApk	P
5.7.2.2	Measurement of prospective touch voltage		P
5.7.3	Equipment set-up, supply connections and earth connections		P
	System of interconnected equipment (separate connections/single connection)..... :		—
	Multiple connections to mains (one connection at a time/simultaneous connections)..... :		—

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.7.4	Earthed conductive accessible parts.....:		N/A
5.7.5	Protective conductor current		N/A
	Supply Voltage (V).....:		—
	Measured current (mA).....:		—
	Instructional Safeguard.....:		N/A
5.7.6	Prospective touch voltage and touch current due to external circuits	No external circuits.	N/A
5.7.6.1	Touch current from coaxial cables		N/A
5.7.6.2	Prospective touch voltage and touch current from external circuits		N/A
5.7.7	Summation of touch currents from external circuits	No external circuits.	N/A
	a) Equipment with earthed external circuits Measured current (mA).....:		N/A
	b) Equipment whose external circuits are not referenced to earth. Measured current (mA).....:		N/A

6	ELECTRICALLY- CAUSED FIRE		P
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		P
6.2.2	Power source circuit classifications	(See appended table 6.2.2)	P
6.2.2.1	General		P
6.2.2.2	Power measurement for worst-case load fault.... :	(See appended table 6.2.2)	P
6.2.2.3	Power measurement for worst-case power source fault.....:	(See appended table 6.2.2)	P
6.2.2.4	PS1	(See appended table 6.2.2)	P
6.2.2.5	PS2	(See appended table 6.2.2)	P
6.2.2.6	PS3	(See appended table 6.2.2)	P
6.2.3	Classification of potential ignition sources	See the following details.	P
6.2.3.1	Arcing PIS	(See appended table 6.2.3.1)	P
6.2.3.2	Resistive PIS	(See appended table 6.2.3.1)	P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials.....:	(See appended table 5.4.1.4, 6.3.2, 9.0, B.2.6)	P
6.3.1 (b)	Combustible materials outside fire enclosure		P
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard Method	For AC plug indoor machine Method by control of fire spread applied, Fire enclosure provided.	P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
6.4.3.1	General		N/A
6.4.3.2	Supplementary Safeguards		N/A
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions..... :		N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits		N/A
6.4.5.2	Supplementary safeguards :	-	P
6.4.6	Control of fire spread in PS3 circuit	Compliance detailed as follows: - Printed board: rated V-1 or better. - Wire insulation (tubing): complying with Clause 6 (See Table 4.1.2 for wiring used). - All other components: at least V-2 except for mounted on min. V-1 material or small parts of combustible material. Insulating transformer: complying with G.5.3. V-0 Fire Enclosure used For AC plug indoor machine The material around the horn is less than 4g	P
6.4.7	Separation of combustible materials from a PIS	Fire enclosure provided.	N/A
6.4.7.1	General..... :		N/A
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier	No specific barrier provided.	N/A
6.4.8	Fire enclosures and fire barriers	See below.	P
6.4.8.1	Fire enclosure and fire barrier material properties		P
6.4.8.2.1	Requirements for a fire barrier	No fire barrier used.	N/A
6.4.8.2.2	Requirements for a fire enclosure		P
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier		P
6.4.8.3.1	Fire enclosure and fire barrier openings		P
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm) :		N/A
	Needle Flame test		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm)	For AC plug indoor machine indoor Bottom :Width 1mm, no matter how long.	P
	Flammability tests for the bottom of a fire enclosure		N/A
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c).....		N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating.....	For AC plug indoor machine fire enclosure is made of V-0 material.	P
6.5	Internal and external wiring		P
6.5.1	Requirements	Internal input and output lead wires comply with UL 758, which has the equivalent requirement with IEC/TS 60695-11-21.	P
6.5.2	Cross-sectional area (mm ²)	See appended table 4.1.2 for detail.	—
6.5.3	Requirements for interconnection to building wiring.....		N/A
6.6	Safeguards against fire due to connection to additional equipment		P
	External port limited to PS2 or complies with Clause Q.1	Equipment output complied with LPS (See Appended table Annex Q.1)	P

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		N/A
7.2	Reduction of exposure to hazardous substances		N/A
7.3	Ozone exposure		N/A
7.4	Use of personal safeguards (PPE)		N/A
	Personal safeguards and instructions.....		—
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010).....		—
7.6	Batteries.....		N/A

8	MECHANICALLY-CAUSED INJURY		P
8.1	General		P
8.2	Mechanical energy source classifications		P
8.3	Safeguards against mechanical energy sources		P
8.4	Safeguards against parts with sharp edges and corners	The sharp edges and corners of the equipment are considered as MS1.	P
8.4.1	Safeguards		N/A
8.5	Safeguards against moving parts		N/A
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
8.5.2	Instructional Safeguard..... :		—
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment		N/A
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A
8.5.4.2.1	Safeguards and Safety Interlocks..... :		N/A
8.5.4.2.2	Instructional safeguards against moving parts		N/A
	Instructional Safeguard..... :		—
8.5.4.2.3	Disconnection from the supply		N/A
8.5.4.2.4	Probe type and force (N)..... :		N/A
8.5.5	High Pressure Lamps		N/A
8.5.5.1	Energy Source Classification		N/A
8.5.5.2	High Pressure Lamp Explosion Test..... :		N/A
8.6	Stability		P
8.6.1	Product classification	The equipment weight is considered as MS1 equipment	P
	Instructional Safeguard..... :	N/A	—
8.6.2	Static stability		N/A
8.6.2.2	Static stability test		N/A
	Applied Force..... :		—
8.6.2.3	Downward Force Test		N/A
8.6.3	Relocation stability test		N/A
	Unit configuration during 10° tilt..... :		—
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test (Applied Force)..... :		N/A
	Position of feet or movable parts..... :		—
8.7	Equipment mounted to wall or ceiling	MS1	N/A
8.7.1	Mounting Means (Length of screws (mm) and mounting surface)		N/A
8.7.2	Direction and applied force..... :		N/A
8.8	Handles strength		N/A
8.8.1	Classification		N/A
8.8.2	Applied Force		N/A
8.9	Wheels or casters attachment requirements		N/A
8.9.1	Classification		N/A
8.9.2	Applied force..... :		—
8.10	Carts, stands and similar carriers		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
8.10.1	General		N/A
8.10.2	Marking and instructions		N/A
	Instructional Safeguard..... :		—
8.10.3	Cart, stand or carrier loading test and compliance		N/A
	Applied force..... :		—
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Applied horizontal force (N)..... :		—
8.10.6	Thermoplastic temperature stability (°C)..... :		N/A
8.11	Mounting means for rack mounted equipment		N/A
8.11.1	General		N/A
8.11.2	Product Classification		N/A
8.11.3	Mechanical strength test, variable <i>N</i> :		N/A
8.11.4	Mechanical strength test 250N, including end stops		N/A
8.12	Telescoping or rod antennas.....		N/A
	Button/Ball diameter (mm)..... :		—

9	THERMAL BURN INJURY		P
9.2	Thermal energy source classifications		P
9.3	Safeguard against thermal energy sources		P
9.4	Requirements for safeguards		P
9.4.1	Equipment safeguard		P
9.4.2	Instructional safeguard :		N/A

10	RADIATION		P
10.2	Radiation energy source classification	RS1	P
10.2.1	General classification	See the following details.	P
10.3	Protection against laser radiation	No such radiation generated from the equipment.	N/A
	Laser radiation that exists equipment:		—
	Normal, abnormal, single-fault..... :		N/A
	Instructional safeguard..... :		—
	Tool..... :		—
10.4	Protection against visible, infrared, and UV radiation	The LED only used for indicating, which is considered as low power & inherently exempt group according to IEC 62471	P
10.4.1	General		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
10.4.1.a)	RS3 for Ordinary and instructed persons..... :		N/A
10.4.1.b)	RS3 accessible to a skilled person..... :		N/A
	Personal safeguard (PPE) instructional safeguard..... :		—
10.4.1.c)	Equipment visible, IR, UV does not exceed RS1.. :		N/A
10.4.1.d)	Normal, abnormal, single-fault conditions :		N/A
10.4.1.e)	Enclosure material employed as safeguard is opaque..... :		N/A
10.4.1.f)	UV attenuation..... :		N/A
10.4.1.g)	Materials resistant to degradation UV..... :		N/A
10.4.1.h)	Enclosure containment of optical radiation..... :		N/A
10.4.1.i)	Exempt Group under normal operating conditions..... :	The LED only used for indicating, which is considered as low power & inherently exempt group according to IEC 62471	P
10.4.2	Instructional safeguard..... :		N/A
10.5	Protection against x-radiation		N/A
10.5.1	X- radiation energy source that exists equipment :		N/A
	Normal, abnormal, single fault conditions		N/A
	Equipment safeguards..... :		N/A
	Instructional safeguard for skilled person..... :		N/A
10.5.3	Most unfavourable supply voltage to give maximum radiation..... :		—
	Abnormal and single-fault condition..... :		N/A
	Maximum radiation (pA/kg)..... :		N/A
10.6	Protection against acoustic energy sources		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output, dB(A)..... :		N/A
	Output voltage, unweighted r.m.s..... :		N/A
10.6.4	Protection of persons		N/A
	Instructional safeguards..... :		N/A
	Equipment safeguard prevent ordinary person to RS2..... :		—
	Means to actively inform user of increase sound pressure..... :		—
	Equipment safeguard prevent ordinary person to RS2..... :		—
10.6.5	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.5.1	Corded passive listening devices with analog		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	input		
	Input voltage with 94 dB(A) L_{Aeq} acoustic pressure output.....:		—
10.6.5.2	Corded listening devices with digital input		N/A
	Maximum dB(A).....:		—
10.6.5.3	Cordless listening device		N/A
	Maximum dB(A).....:		—

B	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		P
B.2	Normal Operating Conditions		P
B.2.1	General requirements.....:	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers..... :		P
B.2.3	Supply voltage and tolerances		P
B.2.5	Input test.....:	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions		P
B.3.1	General requirements.....:	(See appended table B.3)	P
B.3.2	Covering of ventilation openings	(See appended table B.3)	N/A
B.3.3	D.C. mains polarity test		N/A
B.3.4	Setting of voltage selector..... :	Full range	N/A
B.3.5	Maximum load at output terminals.....:	(See appended table B.3)	N/A
B.3.6	Reverse battery polarity		N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.		P
B.3.8	Safeguards functional during and after abnormal operating conditions		P
B.4	Simulated single fault conditions		P
B.4.2	Temperature controlling device open or short-circuited.....:		N/A
B.4.3	Motor tests		N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature		N/A
B.4.4	Short circuit of functional insulation		P
B.4.4.1	Short circuit of clearances for functional insulation		P
B.4.4.2	Short circuit of creepage distances for functional insulation		P
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		P
B.4.6	Short circuit or disconnect of passive components	(See appended table B.4)	P
B.4.7	Continuous operation of components		N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		P
B.4.9	Battery charging under single fault conditions.....:		P

C	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV radiation		N/A
C.1.2	Requirements		N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test		N/A
C.2.1	Test apparatus		N/A
C.2.2	Mounting of test samples		N/A
C.2.3	Carbon-arc light-exposure apparatus		N/A
C.2.4	Xenon-arc light exposure apparatus		N/A

D	TEST GENERATORS		N/A
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator	Circuit 3 of Table D.1 used.	N/A
D.3	Electronic pulse generator		N/A

E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		P
E.1	Audio amplifier normal operating conditions		P
	Audio signal voltage (V).....:	1.80Vac	—
	Rated load impedance (Ω)	8 Ω	—
E.2	Audio amplifier abnormal operating conditions		P

F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS		P
F.1	General requirements		P
	Instructions – Language	English	—
F.2	Letter symbols and graphical symbols		P
F.2.1	Letter symbols according to IEC60027-1		P
F.2.2	Graphic symbols IEC, ISO or manufacturer specific		P
F.3	Equipment markings		P
F.3.1	Equipment marking locations		P

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
F.3.2	Equipment identification markings		P
F.3.2.1	Manufacturer identification	See copy of marking plate	—
F.3.2.2	Model identification	See copy of marking plate	—
F.3.3	Equipment rating markings		P
F.3.3.1	Equipment with direct connection to mains	Considered AC plug indoor machine only.	P
F.3.3.2	Equipment without direct connection to mains	Considered Door bell Considered USB plug indoor machine	P
F.3.3.3	Nature of supply voltage.....	See copy of marking plate	—
F.3.3.4	Rated voltage.....	See copy of marking plate	—
F.3.3.4	Rated frequency.....	See copy of marking plate	—
F.3.3.6	Rated current or rated power.....	See copy of marking plate.	—
F.3.3.7	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device	Full range	N/A
F.3.5	Terminals and operating devices		P
F.3.5.1	Mains appliance outlet and socket-outlet markings.....	No appliance outlet provided.	N/A
F.3.5.2	Switch position identification marking.....		N/A
F.3.5.3	Replacement fuse identification and rating markings.....	Fuse marking on PCB adjacent to fuse: FS1: 22Ω/1/2W(For AC plug indoor machine Dingdong)	P
F.3.5.4	Replacement battery identification marking.....		N/A
F.3.5.5	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification	Considered AC plug indoor machine only.	P
F.3.6.1	Class I Equipment		N/A
F.3.6.1.1	Protective earthing conductor terminal		N/A
F.3.6.1.2	Neutral conductor terminal	Not permanently connected equipment	N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)		P
F.3.6.2.1	Class II equipment with or without functional earth		P
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking	IPX0	—
F.3.8	External power supply output marking	See copy of marking plate	P
F.3.9	Durability, legibility and permanence of marking	See below	P

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
F.3.10	Test for permanence of markings	After the test, the marking remains legible, and moreover the label shows no curling and is not removable by hand.	P
F.4	Instructions		P
	a) Equipment for use in locations where children not likely to be present - marking		N/A
	b) Instructions given for installation or initial use	Explanation is provided with manuals.	P
	c) Equipment intended to be fastened in place		N/A
	d) Equipment intended for use only in restricted access area		N/A
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1		N/A
	f) Protective earthing employed as safeguard		N/A
	g) Protective earthing conductor current exceeding ES 2 limits		N/A
	h) Symbols used on equipment		N/A
	i) Permanently connected equipment not provided with all-pole mains switch		N/A
	j) Replaceable components or modules providing safeguard function		N/A
F.5	Instructional safeguards		N/A
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction		N/A

G	COMPONENTS		P
G.1	Switches		N/A
G.1.1	General requirements		N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	Relays		N/A
G.2.1	General requirements		N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supply power		N/A
G.2.4	Mains relay, modified as stated in G.2		N/A
G.3	Protection Devices		P
G.3.1	Thermal cut-offs		N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691		N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H)..... :		—
	Single Fault Condition..... :		—
	Test Voltage (V) and Insulation Resistance (Ω)..:		—
G.3.3	PTC Thermistors		N/A
G.3.4	Overcurrent protection devices	(see appended table 4.1.2)	P
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.5		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions..... :		N/A
G.4	Connectors		N/A
G.4.1	Spacings		N/A
G.4.2	Mains connector configuration		N/A
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely		N/A
G.5	Wound Components		N/A
G.5.1	Wire insulation in wound components.....	No winding assembly equipment	N/A
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°	No winding assembly equipment	N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s)..... :		—
	Temperature (°C)..... :		—
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	Transformers		N/A
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1).....	No transformer equipment	N/A
	Position..... :	No transformer equipment	—
	Method of protection	No transformer equipment.	—
G.5.3.2	Insulation		N/A
	Protection from displacement of windings..... :		—
G.5.3.3	Overload test..... :		N/A



EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding Temperatures testing in the unit		N/A
G.5.3.3.3	Winding Temperatures - Alternative test method		N/A
G.5.4	Motors		N/A
G.5.4.1	General requirements		N/A
	Position		—
G.5.4.2	Test conditions		N/A
G.5.4.3	Running overload test		N/A
G.5.4.4	Locked-rotor overload test		N/A
	Test duration (days)		—
G.5.4.5	Running overload test for d.c. motors in secondary circuits		N/A
G.5.4.5.2	Tested in the unit		N/A
	Electric strength test (V).....		—
G.5.4.5.3	Tested on the Bench - Alternative test method; test time (h)		N/A
	Electric strength test (V).....		—
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
G.5.4.6.2	Tested in the unit		N/A
	Maximum Temperature		N/A
	Electric strength test (V)		N/A
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h).....		N/A
	Electric strength test (V).....		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
	Operating voltage		—
G.6	Wire Insulation		N/A
G.6.1	General		N/A
G.6.2	Solvent-based enamel wiring insulation	Solvent-based enamel winding is not considered basic insulation.	N/A
G.7	Mains supply cords		N/A
G.7.1	General requirements	No power supply cord provided	N/A
	Type.....		—
	Rated current (A).....		—
	Cross-sectional area (mm ²), (AWG).....		—
G.7.2	Compliance and test method		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.7.3	Cord anchorages and strain relief for non-detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements		N/A
	Strain relief test force (N).....:		—
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm).....:		—
G.7.3.2.4	Strain relief comprised of polymeric material		N/A
G.7.4	Cord Entry..... :		N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Mass (g)		—
	Diameter (m).....:		—
	Temperature (°C)..... :		—
G.7.6	Supply wiring space		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Test with 8 mm strand		N/A
G.8	Varistors		N/A
G.8.1	General requirements		N/A
G.8.2	Safeguard against shock		N/A
G.8.3	Safeguard against fire		N/A
G.8.3.2	Varistor overload test..... :		N/A
G.8.3.3	Temporary overvoltage.....:		N/A
G.9	Integrated Circuit (IC) Current Limiters		N/A
G.9.1 a)	Manufacturer defines limit at max. 5A.		N/A
G.9.1 b)	Limiters do not have manual operator or reset		N/A
G.9.1 c)	Supply source does not exceed 250 VA		—
G.9.1 d)	IC limiter output current (max. 5A)..... :		—
G.9.1 e)	Manufacturers' defined drift		—
G.9.2	Test Program 1		N/A
G.9.3	Test Program 2		N/A
G.9.4	Test Program 3		N/A
G.10	Resistors		N/A
G.10.1	General requirements		N/A
G.10.2	Resistor test		N/A
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.10.3.1	General requirements		N/A
G.10.3.2	Voltage surge test		N/A
G.10.3.3	Impulse test		N/A
G.11	Capacitor and RC units		N/A
G.11.1	General requirements		N/A
G.11.2	Conditioning of capacitors and RC units		N/A
G.11.3	Rules for selecting capacitors		N/A
G.12	Optocouplers		N/A
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results)..... :		N/A
	Type test voltage V _{ini}		—
	Routine test voltage, V _{ini,b}		—
G.13	Printed boards		P
G.13.1	General requirements		P
G.13.2	Uncoated printed boards		P
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
	Compliance with cemented joint requirements (Specify construction)..... :		—
G.13.5	Insulation between conductors on different surfaces		N/A
	Distance through insulation..... :		N/A
	Number of insulation layers (pcs)		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2a)	Thermal conditioning		N/A
G.13.6.2b)	Electric strength test		N/A
G.13.6.2c)	Abrasion resistance test		N/A
G.14	Coating on components terminals		N/A
G.14.1	Requirements		N/A
G.15	Liquid filled components		N/A
G.15.1	General requirements		N/A
G.15.2	Requirements		N/A
G.15.3	Compliance and test methods		N/A
G.15.3.1	Hydrostatic pressure test		N/A
G.15.3.2	Creep resistance test		N/A
G.15.3.3	Tubing and fittings compatibility test		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.15.3.4	Vibration test		N/A
G.15.3.5	Thermal cycling test		N/A
G.15.3.6	Force test		N/A
G.15.4	Compliance		N/A
G.16	IC including capacitor discharge function (ICX)		N/A
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours		N/A
b)	Impulse test using circuit 2 with $U_c =$ to transient voltage		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage		—
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A
D2)	Capacitance		—
D3)	Resistance		—

H	CRITERIA FOR TELEPHONE RINGING SIGNALS	N/A
H.1	General	N/A
H.2	Method A	N/A
H.3	Method B	N/A
H.3.1	Ringling signal	N/A
H.3.1.1	Frequency (Hz)	—
H.3.1.2	Voltage (V)	—
H.3.1.3	Cadence; time (s) and voltage (V)	—
H.3.1.4	Single fault current (mA):.....	—
H.3.2	Tripping device and monitoring voltage.....	N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage complied with	N/A
H.3.2.2	Tripping device	N/A
H.3.2.3	Monitoring voltage (V).....	—

J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION	N/A
	General requirements	N/A

K	SAFETY INTERLOCKS	N/A
K.1	General requirements	N/A
K.2	Components of safety interlock safeguard mechanism	N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
	Compliance..... :		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Compliance and Test method..... :		N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location) :		N/A
K.7.2	Overload test, Current (A)..... :		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test :		N/A

L	DISCONNECT DEVICES		P
L.1	General requirements		P
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized		N/A
L.4	Single phase equipment		P
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices	For AC plug indoor machine	P
L.8	Multiple power sources	Only one a.c. mains connection.	N/A

M	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS		P
	<i>For Door bell</i>		
M.1	General requirements	Internal lithium battery used	P
M.2	Safety of batteries and their cells	Complied with IEC/EN 62133.	P
M.2.1	Requirements		P
M.2.2	Compliance and test method (identify method)... :	Complied with IEC/EN 62133.	P
M.3	Protection circuits		P
M.3.1	Requirements		P
M.3.2	Tests		P
	- Overcharging of a rechargeable battery	7h, no hazards.	P
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery	No reverse charge construction design	N/A
	- Excessive discharging rate for any battery	No hazards.	N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
M.3.3	Compliance	Not chemical leakage, no liquid and explosion, not emission of flame or expulsion of molten meta	N/A
M.4	Additional safeguards for equipment containing secondary lithium battery		P
M.4.1	General		P
M.4.2	Charging safeguards		P
M.4.2.1	Charging operating limits	(See appended table M.4)	P
M.4.2.2a)	Charging voltage, current and temperature..... :	See above	—
M.4.2.2 b)	Single faults in charging circuitry..... :	See above	—
M.4.3	Fire Enclosure	V-0 battery compartment used.	P
M.4.4	Endurance of equipment containing a secondary lithium battery	Transportable equipment.	P
M.4.4.2	Preparation	See below	P
M.4.4.3	Drop and charge/discharge function tests	1000mm height applied.	P
	Drop	The charging voltage did not exceed 5% above the max. rated voltage.	P
	Charge	Charge function under normal operation condition still operated after drop test	P
	Discharge	Discharge function under normal operation condition still operated after drop test	P
M.4.4.4	Charge-discharge cycle test	Complied by completing 3 complete charge and discharge cycles	P
M.4.4.5	Result of charge-discharge cycle test	No fire, explosion or venting occurred	P
M.5	Risk of burn due to short circuit during carrying		P
M.5.1	Requirement		N/A
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A
M.6	Prevention of short circuits and protection from other effects of electric current	Complied with IEC/EN 62133 and internal fault test.	P
M.6.1	Short circuits		P
M.6.1.1	General requirements		P
M.6.1.2	Test method to simulate an internal fault		P
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method)	Complied with IEC/EN 62133 and internal fault test.	P
M.6.2	Leakage current (mA)		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume V_z (m ³ /s)..... :		—
M.8.2.3	Correction factors..... :		—
M.8.2.4	Calculation of distance d (mm) :		—
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse (Determination of compliance: inspection, data review; or abnormal testing) :	See user manual	P

N	ELECTROCHEMICAL POTENTIALS		N/A
	Metal(s) used..... :		—

O	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES		P
	Figures O.1 to O.20 of this Annex applied..... :	Pollution degree considered	—

P	SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS		N/A
P.1	General requirements		N/A
P.2.2	Safeguards against entry of foreign object		N/A
	Location and Dimensions (mm) :		—
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts..... :		N/A
P.2.3.2	Openings in transportable equipment in relation to metalized parts of a barrier or enclosure (identification of supplementary safeguard) :		N/A
P.3	Safeguards against spillage of internal liquids		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts		N/A
P.4.2 a)	Conditioning testing		N/A
	Tc (°C)..... :		—
	Tr (°C)..... :		—
	Ta (°C)..... :		—
P.4.2 b)	Abrasion testing :		N/A
P.4.2 c)	Mechanical strength testing..... :		N/A

Q	CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING		N/A
Q.1	Limited power sources		N/A
Q.1.1 a)	Inherently limited output		N/A
Q.1.1 b)	Impedance limited output		N/A
	- Regulating network limited output under normal operating and simulated single fault condition	(See appended table Annex Q.1)	N/A
Q.1.1 c)	Overcurrent protective device limited output		N/A
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method		N/A
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A) :		—
	Current limiting method..... :		—

R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General requirements		N/A
R.2	Determination of the overcurrent protective device and circuit		N/A
R.3	Test method Supply voltage (V) and short-circuit current (A). :		N/A

S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material..... :		—
	Wall thickness (mm)..... :		—
	Conditioning (°C)..... :		—

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	Flammability test for fire enclosure and fire barrier integrity		N/A
	Samples, material.....:		—
	Wall thickness (mm).....:		—
	Conditioning (°C)..... :		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	Test specimen does not show any additional hole		N/A
S.3	Flammability test for the bottom of a fire enclosure		N/A
	Samples, material.....:		—
	Wall thickness (mm).....:		—
	Cheesecloth did not ignite		N/A
S.4	Flammability classification of materials		N/A
S.5	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material.....:		—
	Wall thickness (mm).....:		—
	Conditioning (test condition), (°C).....:		—
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A

T	MECHANICAL STRENGTH TESTS		P
T.1	General requirements		P
T.2	Steady force test, 10 N	(See appended table T.2)	P
T.3	Steady force test, 30 N		N/A
T.4	Steady force test, 100 N	(See appended table T.4)	N/A
T.5	Steady force test, 250 N	(See appended table T.5)	P
T.6	Enclosure impact test	(See appended table T.6)	P
	Fall test		P



EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Swing test		N/A
T.7	Drop test	1000mm For AC Plug indoor machine	P
T.8	Stress relief test.....	(See appended table T.8)	P
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J).....		—
	Height (m).....		—
T.10	Glass fragmentation test.....		N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm)		—

U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
U.1	General requirements		N/A
U.2	Compliance and test method for non-intrinsically protected CRTs		N/A
U.3	Protective Screen.....		N/A

V	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)		P
V.1	Accessible parts of equipment	No access with test probes to any hazardous parts	P
V.2	Accessible part criterion		P

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.1.2	TABLE: List of critical components					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹	
For AC plug indoor machine						
Plug holder	LG Chem Huizhou Petrochemical Co Ltd	AF312C	ABS,V-0,70°C, Min.Thickness: 2.5mm	UL 94, UL746C	UL E476284	
Enclosure	LG Chem Huizhou Petrochemical Co Ltd	AF312C	ABS,V-0,70°C, Min.Thickness: 2.5mm	UL 94, UL746C	UL E476284	
Shell filling material (The blue insulating plastic on the surface of the AC plug indoor machine)	LG Chem Huizhou Petrochemical Co Ltd	AF312C	ABS,V-0,70°C, Min.Thickness: 2.5mm	UL 94, UL746C	UL E476284	
PCB	MEIZHOU DINGTAI PCB Co., Ltd.	DT-4	V-0, 130°C	UL 796	UL E320008	
Alternate	Treasure Shantou Electronic Technologic Company Ltd	T-M1	V-0, 130°C	UL 796	UL E254667	
Alternate	Camelot Electronic Technology Co Ltd	JL-1	V-0, 130°C	UL 796	UL E350325	
Alternate	Longnan Champion Asia Electronic Technology Co Ltd	F-M	V-0, 130°C	UL 796	UL E254215	
Alternate	XINFENGLIYUDA ELECTRONIC TECHNOLOGY CO LTD	XFLYD-2	V-0, 130°C	UL 796	UL E488191	
Alternate	SHENZHEN STARIVER CIRCUITS CO LTD	SR -02 SR -02A	V-0, 125°C V-0, 130°C	UL 796	UL E258603	
Alternate	MEIZHOU CHINA UNITE ELECTRONIC CO LTD	CU-2	V-0, 130°C	UL 796	UL E320267	
Alternate	GANZHOU ZHONGSHENGLONG ELECTRONIC CO LTD	ZSL-2	V-0, 130°C	UL 796	UL E476721	
Alternate	Interchangeable	Interchangeable	V-0, 130°C	UL 796	UL	
Fuse resistor (FS1)	SHENZHEN JINGHE ELECTRONICS CO LTD	FRKNP-1/2W	22Ω, 1/2W	UL1412	UL E327186	
Electrolytic Capacitor(C4)	Interchangeable	Interchangeable	400V,4.7μF Min. 65°C	EN 62368-1	Test with appliance	

EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Speaker	Interchangeable	Interchangeable	8Ω,0.5W	EN 62368-1	Test with appliance
Internal wire	Interchangeable	Interchangeable	Min. 30V, Min. 24AWG, min. 80°C, VW-1	UL 758	UL
Insulation slices (under the speaker)	JINGMEN GORUN TECHNOLOGY CO LTD	HE11(#)	V-0, 80 °C	UL94 UL746B	UL E305163
For USB plug indoor machine					
Enclosure	LG Chem Huizhou Petrochemical Co Ltd	AF312C	ABS,V-0, 70°C, Min.Thickness:2.5 mm	UL 94, UL746C	UL E476284
PCB	MEIZHOU DINGTAI PCB Co., Ltd.	DT-4	V-0, 130°C	UL 796	UL E320008
Alternate	Treasure Shantou Electronic Technologic Company Ltd	T-M1	V-0, 130°C	UL 796	UL E254667
Alternate	Camelot Electronic Technology Co Ltd	JL-1	V-0, 130°C	UL 796	UL E350325
Alternate	Longnan Champion Asia Electronic Technology Co Ltd	F-M	V-0, 130°C	UL 796	UL E254215
Alternate	XINFENGLIYUDA ELECTRONIC TECHNOLOGY CO LTD	XFLYD-2	V-0, 130°C	UL 796	UL E488191
Alternate	SHENZHEN STARIVER CIRCUITS CO LTD	SR -02 SR -02A	V-0, 125°C V-0, 130°C	UL 796	UL E258603
Alternate	MEIZHOU CHINA UNITE ELECTRONIC CO LTD	CU-2	V-0, 130°C	UL 796	UL E320267
Alternate	GANZHOU ZHONGSHENGLONG ELECTRONIC CO LTD	ZSL-2	V-0, 130°C	UL 796	UL E476721
Alternate	Interchangeable	Interchangeable	V-0, 130°C	UL 796	UL
Speaker	Interchangeable	Interchangeable	8Ω 0.5W	EN 62368-1	Test with appliance
For Door bell					
Enclosure	LG Chem Huizhou Petrochemical Co Ltd	AF312C	ABS,V-0, 70°C, Min.Thickness:2.5 mm	UL 94, UL746C	UL E476284
PCB	MEIZHOU DINGTAI PCB Co., Ltd.	DT-4	V-0, 130°C	UL 796	UL E320008
Alternate	Treasure Shantou Electronic Technologic Company Ltd	T-M1	V-0, 130°C	UL 796	UL E254667
Alternate	Camelot Electronic Technology Co Ltd	JL-1	V-0, 130°C	UL 796	UL E350325



EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Alternate	Longnan Champion Asia Electronic Technology Co Ltd	F-M	V-0, 130°C	UL 796	UL E254215
Alternate	XINFENGLIYUDA ELECTRONIC TECHNOLOGY CO LTD	XFLYD-2	V-0, 130°C	UL 796	UL E488191
Alternate	SHENZHEN STARIVER CIRCUITS CO LTD	SR -02 SR -02A	V-0, 125°C V-0, 130°C	UL 796	UL E258603
Alternate	MEIZHOU CHINA UNITE ELECTRONIC CO LTD	CU-2	V-0, 130°C	UL 796	UL E320267
Alternate	GANZHOU ZHONGSHENGLONG ELECTRONIC CO LTD	ZSL-2	V-0, 130°C	UL 796	UL E476721
Alternate	Interchangeable	Interchangeable	V-0, 130°C	UL 796	UL
Internal wire	Interchangeable	Interchangeable	Min. 30V, Min.24AWG, min. 80°C, VW-1	UL 758	UL
LED lamp	Interchangeable	Interchangeable	DC60mA,1.45V,3 5mW	EN 62368-1	Test with appliance
Speaker	Interchangeable	Interchangeable	8Ω 0.5W	EN 62368-1	Test with appliance
Battery	Zhuhai Gotech intelligent Technology Co., Ltd.	Li-ion18650 5200mAh 3.7V(1S2P)	3.7V, 5200mAh, 19.24Wh	EN 62133-2	EMTEK:ED21 0412064S

Supplementary information:

- 1) Provided evidence ensures the agreed level of compliance.
- 2) Description line content is optional. Main line description needs to clearly detail the component used for testing



EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.8.4, 4.8.5	TABLE: Lithium coin/button cell batteries mechanical tests		N/A
-----------------	---	--	-----

(The following mechanical tests are conducted in the sequence noted.)

4.8.4.2	TABLE: Stress Relief test		—
---------	----------------------------------	--	---

Part	Material	Oven Temperature (°C)	Comments

4.8.4.3	TABLE: Battery replacement test		—
---------	--	--	---

Battery part no.....:			—
-----------------------	--	--	---

Battery Installation/withdrawal	Battery Installation/Removal Cycle	Comments
	1	
	2	
	3	
	4	
	5	
	6	
	8	
	9	
	10	

4.8.4.4	TABLE: Drop test		—
---------	-------------------------	--	---

Impact Area	Drop Distance	Drop No.	Observations
		1	
		2	
		3	

4.8.4.5	TABLE: Impact		—
---------	----------------------	--	---

Impacts per surface	Surface tested	Impact energy (Nm)	Comments

4.8.4.6	TABLE: Crush test		—
---------	--------------------------	--	---

Test position	Surface tested	Crushing Force (N)	Duration force applied (s)

Supplementary information:

EN 62368-1							
Clause		Requirement + Test			Result - Remark		Verdict
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	
5.2.2.5 - Repetitive Pulses							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Off time (ms)	Upk (V)	lpk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	
Test Conditions: Normal – Abnormal - Supplementary information: SC=Short Circuit, OC=Short Circuit							

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements				P
	Supply voltage (V) :	Empty battery only charge	Full battery discharged	Empty battery Charged and discharged	--
	Ambient Tmin (°C) :	--	--	--	--
	Ambient Tmax (°C) :	--	--	--	--
	Tma (°C) :	--	--	--	--
	Maximum measured temperature T of part/at:	T (°C)			Allowed Tmax (°C)
For Door bell					
	E-capacitor C99	55.1	53.7	57.2	105
	PCB under U30	59.6	54.2	61.5	130
	PCB under U4A	58.5	54.6	60.1	130
	camera	56.3	56.5	56.8	ref
	Battery surface	60.5	57.3	60.6	ref
	Internal wire	58.2	57.6	58.5	80
	Plastic enclosure inside near U30	57.9	52.7	58.3	70
	Plastic enclosure inside near battery	59.1	55.9	59.3	70
	Ambient	50.0	50.0	50.0	--
At room temperature					
	Plastic enclosure outside near U30	32.2	26.9	32.6	77*



EN 62368-1				
Clause	Requirement + Test	Result - Remark		Verdict
Plastic enclosure outside near battery	33.0	29.9	33.3	77*
Button	32.7	32.2	33.1	77*
Ambient	25.0	25.0	25.0	--
For AC plug indoor machine				
Plug holder	--	61.2	--	70
E-capacitor C4	--	58.5	--	105
Line chock L3 winding	--	58.4	--	130
PCB under IC1	--	70.5	--	130
PCB under IC2	--	66.4	--	130
Plastic enclosure inside near	--	62.0	--	70
Ambient	--	50.0	--	--
At room temperature				
Plastic enclosure outside near	--	30.4	--	77*
Button	--	34.8	--	77*
Ambient	--	25.0	--	--
For USB plug indoor machine				
PCB under U1	--	59.5	--	130
PCB under U3	--	54.6	--	130
Plastic enclosure inside near	--	52.5	--	70
Ambient	--	50.0	--	--
At room temperature				
Plastic enclosure outside near	--	31.0	--	77*
Button	--	26.9	--	77*
Ambient	--	25.0	--	--
Supplementary information: * Temperature limit for TS1 of accessible enclosure according to Table 38. Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (T _{ma}) of 50°C. Note 2: The temperatures were measured under the worse case normal mode defined in clause B.2.1. Note 3: Temperature limits are calculated as follows: Winding components providing safety isolation:				

5.4.1.10.2	TABLE: Vicat softening temperature of thermoplastics		N/A
Penetration (mm).....:			—
Object/ Part No./Material	Manufacturer/t rademark	T softening (°C)	
--	--	--	
--	--	--	
supplementary information:			

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.10.3	TABLE: Ball pressure test of thermoplastics		P
Allowed impression diameter (mm)		≤ 2 mm	—
Object/Part No./Material	Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm)
Plug holder	LG Chem Huizhou Petrochemical Co Ltd/ AF312C		1.1
Supplementary information:			

5.4.2.2, 5.4.2.4 and 5.4.3	TABLE: Minimum Clearances/Creepage distance							P
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequency (kHz) ¹	Required cl (mm)	cl (mm) ²	Required ³ cr (mm)	cr (mm)	
For AC plug indoor machine:								
L-N trace before fuse FS1(B)*	420	250	0.06	1.5	2.5	2.5	2.5	
Different polarity of fuse FS1(B)*	420	250	0.06	1.5	6.1	2.5	6.1	
L to primary circuit (B)*	420	250	0.06	1.5	2.6	2.5	2.8	
Primary circuit to enclosure	420	250	0.06	3.0	5.4	5.0	>10	
Supplementary information: B= Basic insulation; R = Reinforced insulation. Note 1: Only for frequency above 30 kHz Note 2: See table 5.4.2.4 if this is based on electric strength test Note 3: Provide Material Group Material group: IIIb. 1. * F=Functional insulation, B=Basic insulation; S=Supplementary insulation; R=Reinforced insulation. 2. Unless otherwise specified, the worst conditions of Cl. & Cr. in above mentioned locations have been considered and listed. 3. The maximum operating altitude of 2000m. Clearance values have been evaluated for an operating altitude of max. 2000 meters, based on Table 17 altitude adjustment factor 1.0 Solid insulation at frequencies higher than 30 kHz was evaluated by the electric strength test, see details in table of 5.4.9.								

5.4.2.3	TABLE: Minimum Clearances distances using required withstand voltage			P
	Overvoltage Category (OV):		II	
	Pollution Degree:		2	
Clearance distanced between:	Required withstand voltage	Required cl (mm)	Measured cl (mm)	
See table 5.4.2.2, 5.4.2.4 and 5.4.3 above.	2500Vpeak	1.5 for F/B/S 3.0 for R	See table 5.4.2.2, 5.4.2.4 and 5.4.3 above.	
Supplementary information: The equipment is operated up to 2000 m above sea level as declared by manufacturer. Clearance values have been evaluated for an operating altitude of max. 2000 meters, based on Table 17 altitude adjustment factor 1.0. F=Functional insulation; B=Basic insulation; S=Supplementary insulation; R=Reinforced insulation				

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.2.4	TABLE: Clearances based on electric strength test		N/A
Test voltage applied between:	Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakdown Yes / No
--	--	--	--
--	--	--	--
Supplementary information: Using procedure 2 to determine the clearance.			

5.4.4.2, 5.4.4.5 c) 5.4.4.9	TABLE: Distance through insulation measurements					P
Distance through insulation di at/of:	Peak voltage (V)	Frequency (kHz)	Material	Required DTI (mm)	DTI (mm)	
For AC plug indoor machine:						
Enclosure	420	60	1)	0.4	1)	
Insulation slices	420	60	1)	--	1)	
Supplementary information:						
1). See appended table 4.1.2 for details.						
2) Solid insulation at frequencies higher than 30kHz was evaluated by the electric strength test, see details in table of 5.4.9.						

5.4.9	TABLE: Electric strength tests			P
Test voltage applied between:	Voltage shape (AC, DC)	Test voltage (V)	Breakdown Yes / No	
For AC plug indoor machine:				
Functional:				
--	--	--	--	
Basic/supplementary:				
L and N (Fuse FS1 disconnect)	DC	2500	No	
Insulation material under the speaker	DC	2500	No	
Reinforced:				
L, N to plastic enclosure	DC	4000	No	
L, N to output terminal	DC	4000	No	
Enclosure inside to Enclosure outside	DC	4000	No	
Routine Tests:				
--	--	--	--	
Supplementary information:				
1) Test after humidity treatment, heating test, and for unit primary to secondary, primary to plastic enclosure electric strength after each fault condition test.				
2) Tests were performed on product with each source listed in table 4.1.2.				
3) The DC voltage source was performed on all testing once in forward and once in reverse.				



EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

5.5.2.2	TABLE: Stored discharge on capacitors					N/A
Supply Voltage (V), Hz	Test Location	Operating Condition (N, S)	Switch position On or off	Measured Voltage (after 2 seconds)	ES Classification	
--	--	--	--	--	--	
--	--	--	--	--	--	

Supplementary information:

The end system may be pluggable equipment type A. Limit of ES1 applied for mains terminal as accessible part.

X-capacitors installed for testing are:

bleeding resistor rating:

Notes:

A. Test Location:

Phase to Neutral; Phase to Phase; Phase to Earth; and/or Neutral to Earth

B. Operating condition abbreviations:

N – Normal operating condition (e.g., normal operation, or open fuse); S –Single fault condition

5.6.6.2	TABLE: Resistance of protective conductors and terminations				N/A
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)	
--	--	--	--	--	
--	--	--	--	--	

Supplementary information:

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part		N/A
Supply voltage.....:	264V, 60Hz		—
Location	Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7		Touch current (mA)
Output terminal “+/-” to earth (normal/reverse polarity)	1		--
	2*		--
	3		--
	4		--
	5		--
	6		--
	8		--

Notes:

[1] Supply voltage is the anticipated maximum Touch Voltage

[2] Earthed neutral conductor [Voltage differences less than 1% or more]

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
[3]	Specify method used for measurement as described in IEC 60990 sub-clause 4.3		
[4]	IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.		
[5]	(* IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.		
a)	Not considered IT power system.		
b)	Not three phase equipment.		
c)	Not IT power system or three phase delta system.		
d)	Not three-phase for use on centre-earthed delta supply system.		
e)	Not such parts.		

6.2.2	Table: Electrical power sources (PS) measurements for classification					P
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s ^{*)}	PS Classification	
For Door bell						
Cell output "+" to "-"	Normal operation	Power (W) :	2.41	--	PS1	
		V _A (V) :	2.68	--		
		I _A (A) :	0.9	--		
For AC plug indoor machine Power						
Output terminal (consists speaker circuit)	Normal operation	Power (W) :	0.18	--	PS1	
		V _A (V) :	1.80	--		
		I _A (A) :	0.01	--		
Abbreviation: Single fault result refer to appended table Annex Q.1.						
1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.						

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS)				P
Location	Open circuit voltage After 3 s (V _p)	Measured r.m.s current (I _{rms})	Calculated value (V _p x I _{rms})	Arcing PIS? Yes / No	
See below	--	--	--	--	
Supplementary information:					
For AC Plug indoor machine: Considered arcing PIS in all circuit.					
An Arcing PIS requires a minimum of 50 V (peak) a.c. or d.c. An Arcing PIS is established when the product of the open circuit voltage (V _p) and normal operating condition rms current (I _{rms}) is greater than 15.					

6.2.3.2	Table: Determination of Potential Ignition Sources (Resistive PIS)				P
Circuit Location (x-y)	Operating Condition (Normal / Describe Single Fault)	Measured wattage or VA During first 30 s (W / VA)	Measured wattage or VA After 30 s (W / VA)	Protective Circuit, Regulator, or PTC Operated? Yes / No (Comment)	Resistive PIS? Yes/No



EN 62368-1						
Clause	Requirement + Test			Result - Remark		Verdict
See below	--	--	--	--	--	--
Supplementary Information: For AC Plug indoor machine: Considered Resistive PIS in all circuit. A combination of voltmeter, VA and ammeter IA may be used instead of a wattmeter. If a separate voltmeter and ammeter are used, the product of (VA x IA) is used to determine Resistive PIS classification. A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, <u>or</u> (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.						

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

8.5.5	TABLE: High Pressure Lamp	N/A	
Description	Values	Energy Source Classification	
Lamp type..... :		—	
Manufacturer..... :		—	
Cat no..... :		—	
Pressure (cold) (MPa)..... :		MS_	
Pressure (operating) (MPa)..... :		MS_	
Operating time (minutes)..... :		—	
Explosion method..... :		—	
Max particle length escaping enclosure (mm) :		MS_	
Max particle length beyond 1 m (mm)..... :		MS_	
Overall result			
Supplementary information:			

B.2.5	TABLE: Input test							P
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status	
For Door bell								
Empty battery only charge								
5Vdc	0.24	1.0	1.2	--	--	--	Battery charge current for charging mode : 1.006A/3.18V	
Empty battery Charged and discharged								
5Vdc	0.32	1.0	1.6	--	--	--	Battery charge current for charging mode : 1.030A/3.18V	
Full battery discharged								
--	--	--	--	--	--	--	Battery discharge current for charging mode : 0.423A/4.16V	
For AC plug indoor machine								
90V/50HZ	0.023	--	0.76	--	FS1	0.023	The speaker work	
90V/60HZ	0.023	--	0.72	--	FS1	0.023	The speaker work	
100V/50HZ	0.022	0.5	0.73	--	FS1	0.022	The speaker work	
100V/60HZ	0.021	0.5	0.68	--	FS1	0.021	The speaker work	
240V/50HZ	0.008	0.5	0.71	--	FS1	0.008	The speaker work	
240V/60HZ	0.007	0.5	0.62	--	FS1	0.007	The speaker work	
264V/50HZ	0.006	--	0.68	--	FS1	0.006	The speaker work	
264V/60HZ	0.006	--	0.61	--	FS1	0.006	The speaker work	

EN 62368-1							
Clause	Requirement + Test				Result - Remark		Verdict
For USB plug indoor machine							
5Vdc	0.056	1.0	0.28	--	--	0.056	The speaker work
Supplementary information: Equipment may be have rated current or rated power or both. Both should be measured.							

B.3		TABLE: Abnormal operating condition tests						P
Ambient temperature (°C) :					25°C, if not specified		—	
Power source for EUT: Manufacturer, model/type, output rating :					--		—	
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
For Door bell								
Full battery discharge								
Speaker	SC	--	--	--	--	--	--	Unit shutdown immediately, recoverable, no hazard Battery output: 4.16V/0.001A
Over discharging (U31 Pin 9-16)	SC	4.16V	7h	--	--	--	Battery surface: 33.0°C. Ambient: 25.0°C. Plastic enclosure outside near battery:31.2°C Ambient: 25.0°C.	Unit normal operation, no hazard. Battery discharging current: 4.16V0.424A
Empty battery charge								
only charge(U31 pin 2-16)	SC	3.18Vdc	7h	--	--	See right	Battery surface: 37.6°C. Ambient: 25.0°C. Plastic enclosure outside near battery:34.1°C Ambient: 25.0°C.	Unit normal working no damaged, no hazards Battery charge current: 3.18V1.009A
For AC plug indoor machine								
Speaker	SC	264Vac	30min	--	--	--	--	Unit shutdown immediately, recoverable, no hazard
For USB plug indoor machine								
Speaker	SC	264Vac	30min	--	--	--	--	Unit shutdown immediately, recoverable, no hazard

**EN 62368-1**

Clause	Requirement + Test	Result - Remark	Verdict
<p>Supplementary information: O-L=over load.</p> <p>Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column "Abnormal/Fault." Specify if test condition by indicating "Abnormal" then the condition for a Clause B.3 test or "Single Fault" then the condition for Clause B.4.</p> <p>During single fault operating condition test, the output voltage did not increase by more than 10% of its rated output voltage under normal operating condition.</p>			



EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

B.4		TABLE: Fault condition tests						P
Ambient temperature (°C)					25°C, if not specified		—	
Power source for EUT: Manufacturer, model/type, output rating ..					--		—	
Component No.	Fault Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
For Door bell								
5Vdc supply, only charge with empty battery								
U30 pin 2-7	S-C	5Vdc	30min	--	--	--	--	Unit shutdown immediately recoverable, no hazard. Battery:3.18V /0.001A
U30 pin 2-9	S-C	5Vdc	30min	--	--	--	--	Unit shutdown immediately recoverable, no hazard. Battery:3.18V /0.001A
Full battery discharge								
BAT B+ to B-	S-C		30min	--	--	--	--	Unit shutdown immediately recoverable, no hazard. Battery:4.16V /0.001A
For AC plug indoor machine								
C4	S-C	5Vdc	1s	FS1	--	--	--	Fuse FS1 opened immediately. No hazards. Touch voltage (+ to -): 0 V. Touch current (+/- to earth): 0.256mApeak ;
D7	S-C	5Vdc	1s	FS1	--	--	--	Fuse FS1 opened immediately. No hazards. Touch voltage (+ to -): 0 V. Touch current (+/- to earth): 0.256mApeak ;

EN 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
For USB plug indoor machine								
C3	S-C	5Vdc	30min	--	--	--	--	Unit shutdown immediately and recoverable, No hazard.
Supplementary information: 1) S-C: Short-circuited; O-C: Open-circuited; 2) The test result shown all safeguards remained effective and didn't lead to a single fault condition during abnormal operating condition; In addition all safeguards complied with applicable requirements in this standard after restoration of normal operating conditions. 3) The test result showed no Class 1 or 2 energy source become Class 3 level during and after single fault condition. 4) Tests were performed on product with each source of fuse listed in table 4.1.2. 5) During single fault operating condition test, the output voltage did not increase by more than 10% of its rated output voltage under normal operating condition.								

Annex M	TABLE: Batteries								P
The tests of Annex M are applicable only when appropriate battery data is not available									
Is it possible to install the battery in a reverse polarity position?..... :									
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
For Door bell									
Max. current during normal condition	--	--	--	1.006A	2A	0.423A	1.04A	--	--
Max. current during fault condition (U31 pin 2-16 short circuit)	--	--	--	1.009A	2A	0.424A	1.04A	--	--
Max. current during fault condition (U31 pin 9-16 short circuit)	--	--	--	1.009A	2A	0.424A	1.04A	--	--
Test results:									
- Chemical leaks						Not teh chemical leak		No hazards	
- Explosion of the battery						Not the explosion		No hazards	
- Emission of flame or expulsion of molten metal						Not the flame		No hazards	
- Electric strength tests of equipment after completion of tests						4000Vdc		No hazards	

EN 62368-1									
Clause	Requirement + Test				Result - Remark				Verdict
Annex M	TABLE: Batteries								P
The tests of Annex M are applicable only when appropriate battery data is not available									
Is it possible to install the battery in a reverse polarity position?..... :									
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Supplementary information:									

Annex M.4	Table: Additional safeguards for equipment containing secondary lithium batteries							P
Battery/Cell No.	Test conditions	Measurements			Observation			
		U	I (A)	Temp (°C)				
For Door bell								
Battery part	Normal	3.18	0.040	0	Battery normal charging, when cell temperature drop to 0°C , Battery current drop			
Battery part	single fault: U31 pin 2-16 SC on main board	3.23	0.041	0	Battery normal charging, when cell temperature drop to 0°C , Battery current drop			
Battery part	Normal	3.18	0.001	45	Battery normal charging, when cell temperature up to 48 °C , unit stop charging			
Battery part	single fault: U31 pin 2-16 SC on main board	3.18	0.001	45	Battery normal charging, when cell temperature up to 48 °C , unit stop charging			
Battery part	After drop test	3.18	0.103	25	No damaged. No hazard. Fire or explosion of the battery not occurs			

EN 62368-1				
Clause	Requirement + Test		Result - Remark	Verdict
Supplementary Information:				
Battery identification	Charging at T_{lowest} (°C)	Observation	Charging at $T_{highest}$ (°C)	Observation
For Door bell				
Battery part (normal operation)	0	The battery charging circuit limit the current to the value specified by the battery manufacturer	45	The battery charging circuit stop charging
Battery part (Abnormal operation)	0	The battery charging circuit limit the current to the value specified by the battery manufacturer	45	The battery charging circuit stop charging
Battery part (single fault: U31 pin 2-16 SC on main board)	0	The battery charging circuit limit the current to the value specified by the battery manufacturer	45	The battery charging circuit stop charging
Supplementary Information:				

Annex Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS)					N/A
Note: Measured UOC (V) with all load circuits disconnected:						
Output Circuit	Components	U _{oc} (V)	I _{sc} (A)		S (VA)	
			Meas.	Limit	Meas.	Limit
--	Normal	--	--	--	--	--
	--	--	--	--	--	--
	--	--	--	--	--	--
	--	--	--	--	--	--
	--	--	--	--	--	--
	--	--	--	--	--	--
Supplementary Information: SC=Short circuit, OC=Open circuit *: Unit shutdown immediately, recoverable, no hazard. #: Fuse F1 opened immediately, no hazard.						

T.2, T.3, T.4, T.5	TABLE: Steady force test					P
Part/Location	Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observation	
For AC plug indoor machine						

EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Enclosure top,	Plastic*	See table 4.1.2	100	5	Enclosure remained intact, no crack/ opening developed. Internal ES3, TS3 were not accessible after test. No insulation breakdown.
Enclosure front	Plastic*	See table 4.1.2	100	5	Enclosure remained intact, no crack/ opening developed. Internal ES3, TS3 were not accessible after test. No insulation breakdown.
Enclosure side,	Plastic*	See table 4.1.2	100	5	Enclosure remained intact, no crack/ opening developed. Internal ES3, TS3 were not accessible after test. No insulation breakdown.
Internal components / parts(T.2)	--	--	10	5	No reduction the clearances and creepage distances
For USB indoor machine and Doorbell					
Enclosure top,	Plastic*	See table 4.1.2	250	5	Enclosure remained intact, no crack/ opening developed. Internal TS3 were not accessible after test. No insulation breakdown.
Enclosure front	Plastic*	See table 4.1.2	250	5	Enclosure remained intact, no crack/ opening developed. Internal TS3 were not accessible after test. No insulation breakdown.
Enclosure side,	Plastic*	See table 4.1.2	250	5	Enclosure remained intact, no crack/ opening developed. Internal TS3 were not accessible after test. No insulation breakdown.
Supplementary information: *Tests were performed on product with each source listed in table 4.1.2.					

T.6, T.9	TABLE: Impact tests				P
Part/Location	Material	Thickness (mm)	Vertical distance (mm)	Observation	
For AC plug indoor machine					

EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Enclosure top (T.6)	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/opening developed. Internal ES3, TS3 were not accessible after test. No insulation breakdown.	
Enclosure side (T.6)	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/opening developed. Internal ES3, TS3 were not accessible after test. No insulation breakdown.	
Enclosure bottom (T.6)	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/opening developed. Internal ES3, TS3 were not accessible after test. No insulation breakdown.	
For USB indoor machine and Doorbell					
Enclosure top (T.6)	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/opening developed. Internal TS3 were not accessible after test. No insulation breakdown.	
Enclosure side (T.6)	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/opening developed. Internal TS3 were not accessible after test. No insulation breakdown.	
Enclosure bottom (T.6)	Plastics*	See table 4.1.2	1300	Enclosure remained intact, no crack/opening developed. Internal TS3 were not accessible after test. No insulation breakdown.	
Supplementary information: *Tests were performed on product with each source listed in table 4.1.2.					

T.7	TABLE: Drop tests				P
Part/Location	Material	Thickness (mm)	Drop Height (mm)	Observation	
For AC plug indoor machine					
Enclosure Top	Plastic*	See table 4.1.2	1000	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal ES3, TS3 were not accessible after test. No insulation breakdown.	
Enclosure Front	Plastic*	See table 4.1.2	1000	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal ES3, TS3 were not accessible after test. No insulation breakdown.	
Enclosure Side	Plastic*	See table 4.1.2	1000	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal ES3, TS3 were not accessible after test. No insulation breakdown.	
For door bell					



EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Enclosure Top	Plastic*	See table 4.1.2	500	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
Enclosure Front	Plastic*	See table 4.1.2	500	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
Enclosure Side	Plastic*	See table 4.1.2	500	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
For USB plug indoor machine					
Enclosure Top	Plastic*	See table 4.1.2	500	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
Enclosure Front	Plastic*	See table 4.1.2	500	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
Enclosure Side	Plastic*	See table 4.1.2	500	After the drop test, enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
Supplementary information: *Tests were performed on product with each source listed in table 4.1.2.					

T.8	TABLE: Stress relief test					P
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
For door bell						
Complete equipment	Plastics*	See table 4.1.2	70	7	Enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.	
For AC plug indoor machine						



EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Complete equipment	Plastics*	See table 4.1.2	72	7	Enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.
For USB plug indoor machine					
Complete equipment	Plastics*	See table 4.1.2	70	7	Enclosure remained intact, no cracking/opening developed in the enclosure joint. Internal TS3 were not accessible after test. No insulation breakdown.
Supplementary information: *Tests were performed on product with each source listed in table 4.1.2.					

EN 62368-1																																							
Clause	Requirement + Test	Result - Remark	Verdict																																				
ATTACHMENT TO TEST REPORT																																							
EN 62368-1																																							
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES																																							
(Audio/video, information and communication technology equipment - Part 1: Safety requirements)																																							
Differences according to: EN 62368-1:2014+A11:2017																																							
Attachment Form No: EU_GD_IEC62368_1D_II																																							
Attachment Originator: Nemko AS																																							
Master Attachment: Date 2021-02-04																																							
Copyright © 2021 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.																																							
	CENELEC COMMON MODIFICATIONS (EN)		P																																				
	Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2014 are prefixed "Z".		P																																				
CONTENTS	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions Annex ZC (informative) A-deviations Annex ZD (informative) IEC and CENELEC code designations for flexible cords		P																																				
	Delete all the "country" notes in the reference document (IEC 62368-1:2014) according to the following list: <table border="1" data-bbox="424 1220 1396 1680"> <tbody> <tr> <td>0.2.1</td> <td>Note</td> <td>1</td> <td>Note 3</td> <td>4.1.15</td> <td>Note</td> </tr> <tr> <td>4.7.3</td> <td>Note 1 and 2</td> <td>5.2.2.2</td> <td>Note</td> <td>5.4.2.3.2.2 Table 13</td> <td>Note c</td> </tr> <tr> <td>5.4.2.3.2.4</td> <td>Note 1 and 3</td> <td>5.4.2.5</td> <td>Note 2</td> <td>5.4.5.1</td> <td>Note</td> </tr> <tr> <td>5.5.2.1</td> <td>Note</td> <td>5.5.6</td> <td>Note</td> <td>5.6.4.2.1</td> <td>Note 2 and 3</td> </tr> <tr> <td>5.7.5</td> <td>Note</td> <td>5.7.6.1</td> <td>Note 1 and 2</td> <td>10.2.1 Table 39</td> <td>Note 2, 3 and 4</td> </tr> <tr> <td>10.5.3</td> <td>Note 2</td> <td>10.6.2.1</td> <td>Note 3</td> <td>F.3.3.6</td> <td>Note 3</td> </tr> </tbody> </table>		0.2.1	Note	1	Note 3	4.1.15	Note	4.7.3	Note 1 and 2	5.2.2.2	Note	5.4.2.3.2.2 Table 13	Note c	5.4.2.3.2.4	Note 1 and 3	5.4.2.5	Note 2	5.4.5.1	Note	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3	5.7.5	Note	5.7.6.1	Note 1 and 2	10.2.1 Table 39	Note 2, 3 and 4	10.5.3	Note 2	10.6.2.1	Note 3	F.3.3.6	Note 3	P
0.2.1	Note	1	Note 3	4.1.15	Note																																		
4.7.3	Note 1 and 2	5.2.2.2	Note	5.4.2.3.2.2 Table 13	Note c																																		
5.4.2.3.2.4	Note 1 and 3	5.4.2.5	Note 2	5.4.5.1	Note																																		
5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3																																		
5.7.5	Note	5.7.6.1	Note 1 and 2	10.2.1 Table 39	Note 2, 3 and 4																																		
10.5.3	Note 2	10.6.2.1	Note 3	F.3.3.6	Note 3																																		
	For special national conditions, see Annex ZB.		P																																				
1	Add the following note: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2011/65/EU.		P																																				

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.Z1	<p>Add the following new subclause after 4.9:</p> <p>To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c):</p> <p>a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as parts of the equipment;</p> <p>b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation;</p> <p>c) it is permitted for pluggable equipment type B or permanently connected equipment, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.</p> <p>If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.</p>		P
5.4.2.3.2.4	<p>Add the following to the end of this subclause:</p> <p>The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.</p>	No connection to external circuit.	N/A
10.2.1	<p>Add the following to ^{c)} and ^{d)} in table 39:</p> <p>For additional requirements, see 10.5.1.</p>	No radiation.	N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
10.5.1	<p>Add the following after the first paragraph: <i>For RS 1 compliance is checked by measurement under the following conditions:</i></p> <p><i>In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or presets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.</i></p> <p>NOTE Z1 Soldered joints and paint lockings are examples of adequate locking.</p> <p><i>The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm², at any point 10 cm from the outer surface of the apparatus.</i></p> <p><i>Moreover, the measurement shall be made under fault conditions causing an increase of the high-voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.</i></p> <p><i>For RS1, the dose-rate shall not exceed 1 μSv/h taking account of the background level.</i></p> <p>NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.</p>		N/A
10.6.1	<p>Add the following paragraph to the end of the subclause: EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.</p>		N/A
10.Z1	<p>Add the following new subclause after 10.6.5. 10.Z1 Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz</p> <p>The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz).</p> <p>For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand-held and body-mounted devices, attention is drawn to EN 50360 and EN 50566</p>		N/A
G.7.1	<p>Add the following note: NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.</p>		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
Bibliography	<p>Add the following standards:</p> <p>Add the following notes for the standards indicated:</p> <p>IEC 60130-9 NOTE Harmonized as EN 60130-9.</p> <p>IEC 60269-2 NOTE Harmonized as HD 60269-2.</p> <p>IEC 60309-1 NOTE Harmonized as EN 60309-1.</p> <p>IEC 60364 NOTE some parts harmonized in HD 384/HD 60364 series.</p> <p>IEC 60601-2-4 NOTE Harmonized as EN 60601-2-4.</p> <p>IEC 60664-5 NOTE Harmonized as EN 60664-5.</p> <p>IEC 61032:1997 NOTE Harmonized as EN 61032:1998 (not modified).</p> <p>IEC 61508-1 NOTE Harmonized as EN 61508-1.</p> <p>IEC 61558-2-1 NOTE Harmonized as EN 61558-2-1.</p> <p>IEC 61558-2-4 NOTE Harmonized as EN 61558-2-4.</p> <p>IEC 61558-2-6 NOTE Harmonized as EN 61558-2-6.</p> <p>IEC 61643-1 NOTE Harmonized as EN 61643-1.</p> <p>IEC 61643-21 NOTE Harmonized as EN 61643-21.</p> <p>IEC 61643-311 NOTE Harmonized as EN 61643-311.</p> <p>IEC 61643-321 NOTE Harmonized as EN 61643-321.</p> <p>IEC 61643-331 NOTE Harmonized as EN 61643-331.</p>		N/A
ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)		P
4.1.15	<p>Denmark, Finland, Norway and Sweden</p> <p>To the end of the subclause the following is added:</p> <p>Class I pluggable equipment type A intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet.</p> <p>The marking text in the applicable countries shall be as follows:</p> <p>In Denmark: "Apparatetsstikpropskaltilsluttesenstikkontakt med jordsom giver forbindelse til stikproppens jord."</p> <p>In Finland: "Laite on liitettävä suojakoskettimillavarustettuun pistorasiaan"</p> <p>In Norway: "Apparatet må tilkoples jordet stikkontakt"</p> <p>In Sweden: "Apparatens skall anslutas till jordat uttag"</p>	Added	N/A
4.7.3	<p>United Kingdom</p> <p>To the end of the subclause the following is added:</p> <p>The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex</p>	Not direct plug - in equipment.	N/A
5.2.2.2	<p>Denmark</p> <p>After the 2nd paragraph add the following:</p> <p>A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.</p>	No high touch current measured.	N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.11.1 and Annex G	<p>Finland and Sweden</p> <p>To the end of the subclause the following is added: For separation of the telecommunication network from earth the following is applicable:</p> <p>If this insulation is solid, including insulation forming part of a component, it shall at least consist of either</p> <ul style="list-style-type: none"> • two layers of thin sheet material, each of which shall pass the electric strength test below, or • one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. <p>If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition</p> <ul style="list-style-type: none"> • passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV), and • is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5kV. <p>It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.</p> <p>A capacitor classified Y3 according to EN 60384-14:2005, may bridge this insulation under the following conditions:</p> <ul style="list-style-type: none"> • the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in 5.4.11; • the additional testing shall be performed on all the test specimens as described in EN 60384-14; the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14. 	No connection to such a network.	N/A
5.5.2.1	<p>Norway</p> <p>After the 3rd paragraph the following is added: Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).</p>		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.5.6	<p>Finland, Norway and Sweden</p> <p>To the end of the subclause the following is added: Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.</p>	No such resistor used.	N/A
5.6.1	<p>Denmark</p> <p>Add to the end of the subclause</p> <p>Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment.</p> <p><i>Justification:</i> In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.</p>		N/A
5.6.4.2.1	<p>Ireland and United Kingdom</p> <p>After the indent for pluggable equipment type A, the following is added:</p> <p>– the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug.</p>		P
5.6.5.1	<p>To the second paragraph the following is added: The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm² to 1,5 mm² in cross-sectional area.</p>		N/A
5.7.5	<p>Denmark</p> <p>To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.</p>		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.7.6.1	<p>Norway and Sweden</p> <p>To the end of the subclause the following is added:</p> <p>The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system.</p> <p>It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example.</p> <p>The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:</p> <p>“Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)”</p> <p>NOTE In Norway, due to regulation for CATV-installations, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min.</p> <p>Translation to Norwegian (the Swedish text will also be accepted in Norway):</p> <p>“Apparatersomerkoplettilbeskyttelsesjord via nettpluggog/eller via annetjordtilkopleststyr – ogertilkoplest et koaksialbasertkabel-TV nett, kanforårsakebrannfare. For å unngådetteskal det vedtilkoplingavapparatertil kabel-TV nett installeresengalvanisk isolator mellomapparatetogkabel-TV nettet.”</p> <p>Translation to Swedish:</p> <p>”Apparatersomärkopplad till skyddsjord via jordatvägguttagoch/eller via annanutrustningochsamtidigtärkopplad till kabel-TV nätkanivissa fall medföra risk för brand. Förrättundvikadettaskall vid anslutningavapparatentill kabel-TV nätgalvanisk isolator finnas mellanapparatenochoch kabel-TV nätet.”.</p>		N/A
5.7.6.2	<p>Denmark</p> <p>To the end of the subclause the following is added:</p> <p>The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA .</p>	See for 5.2.2.2 above.	N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
B.3.1 and B.4	<p>Ireland and United Kingdom</p> <p>The following is applicable:</p> <p>To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met</p>	Not direct plug-in equipment.	N/A
G.4.2	<p>Denmark</p> <p>To the end of the subclause the following is added:</p> <p>Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011.</p> <p>CLASS I EQUIPMENT provided with socket-outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.</p> <p>If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.</p> <p>Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a.</p> <p>Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.</p> <p>Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 1-7a</p> <p><i>Justification:</i> Heavy Current Regulations, Section 6c</p>		N/A
G.4.2	<p>United Kingdom</p> <p>To the end of the subclause the following is added:</p> <p>The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.</p>		N/A

EN 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.7.1	<p>United Kingdom</p> <p>To the first paragraph the following is added: Equipment which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'standard plug' in accordance with the Plugs and Sockets etc (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations.</p> <p>NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.</p>		N/A
G.7.1	<p>Ireland</p> <p>To the first paragraph the following is added: Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State which is equivalent to the relevant Irish Standard</p>		N/A
G.7.2	<p>Ireland and United Kingdom</p> <p>To the first paragraph the following is added: A power supply cord with a conductor of 1,25 mm² is allowed for equipment which is rated over 10 A and up to and including 13 A.</p>		N/A

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	--	--
10.5.2	<p>Germany</p> <p>The following requirement applies: For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization is required, or application of type approval (Bauartzulassung) and marking.</p> <p><i>Justification:</i> German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM.</p> <p>NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int +49-531-592-6320, Internet: http://www.ptb.de</p>	Not such equipment.	N/A



Figure 1 Overall view (For Doorbell)



Figure 2 Overall view(For Doorbell)



Figure 3 Internal view(For Doorbell)



Figure 4 Internal view(For Doorbell)

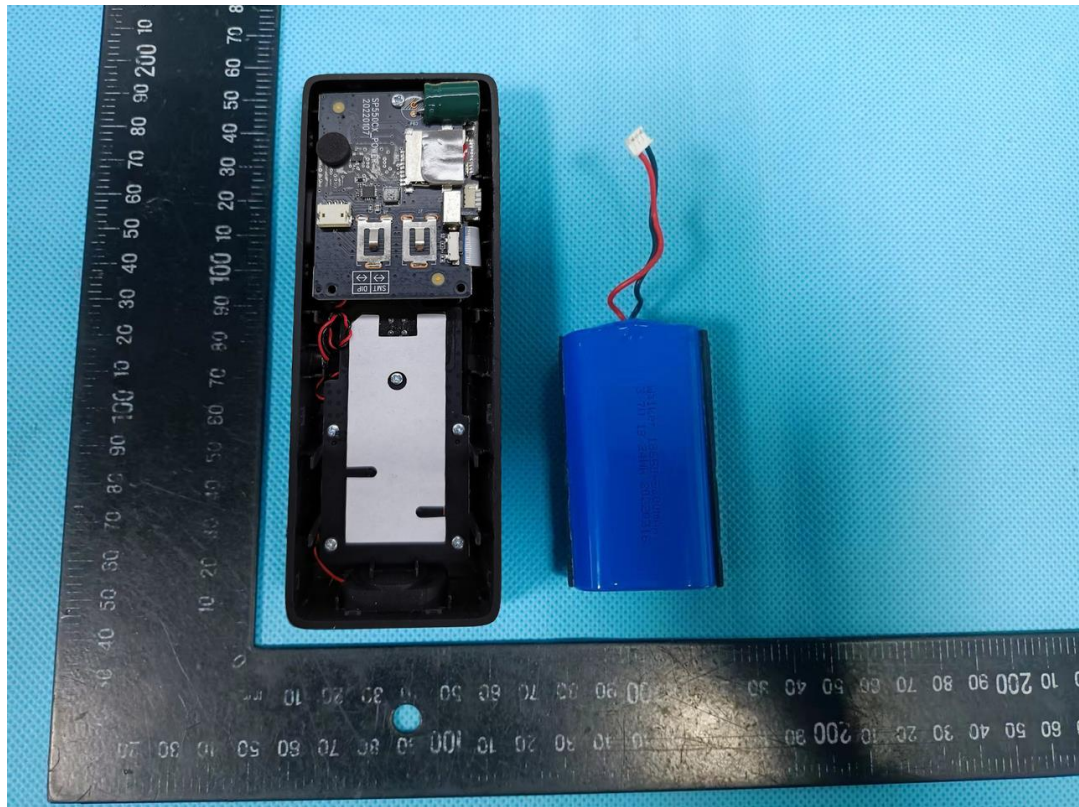


Figure 5 Internal view (For Doorbell)

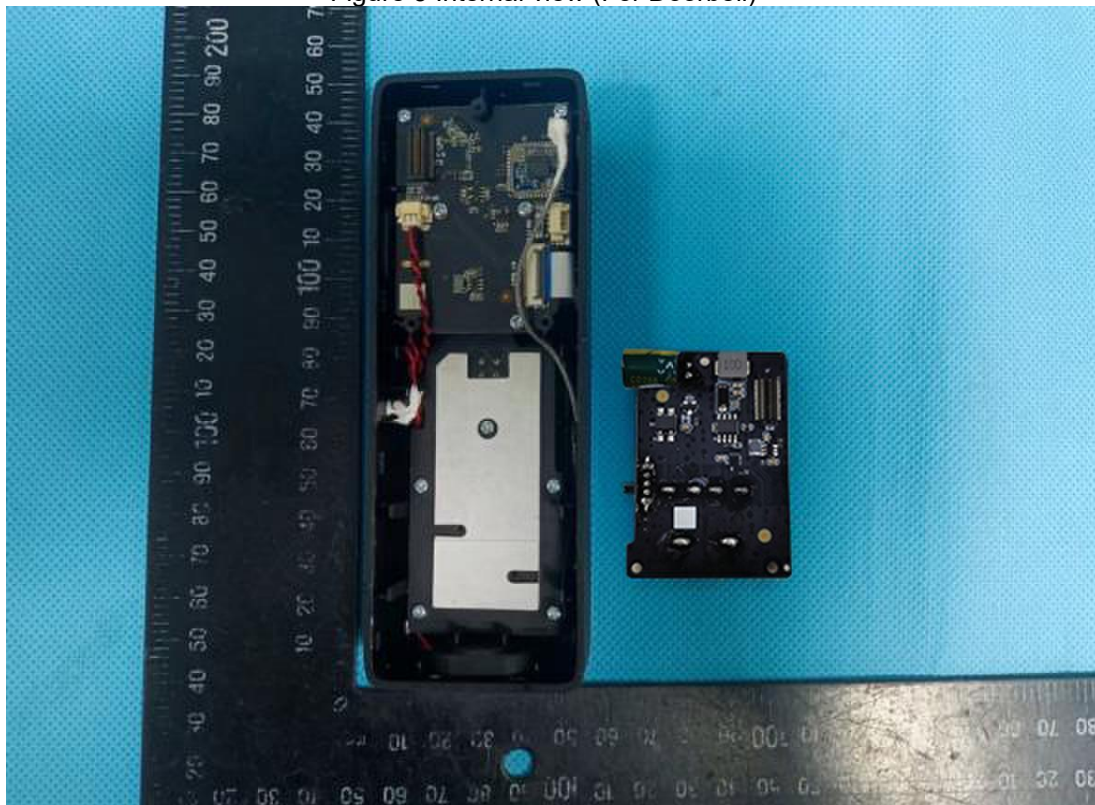


Figure 6 Internal view (For Doorbell)

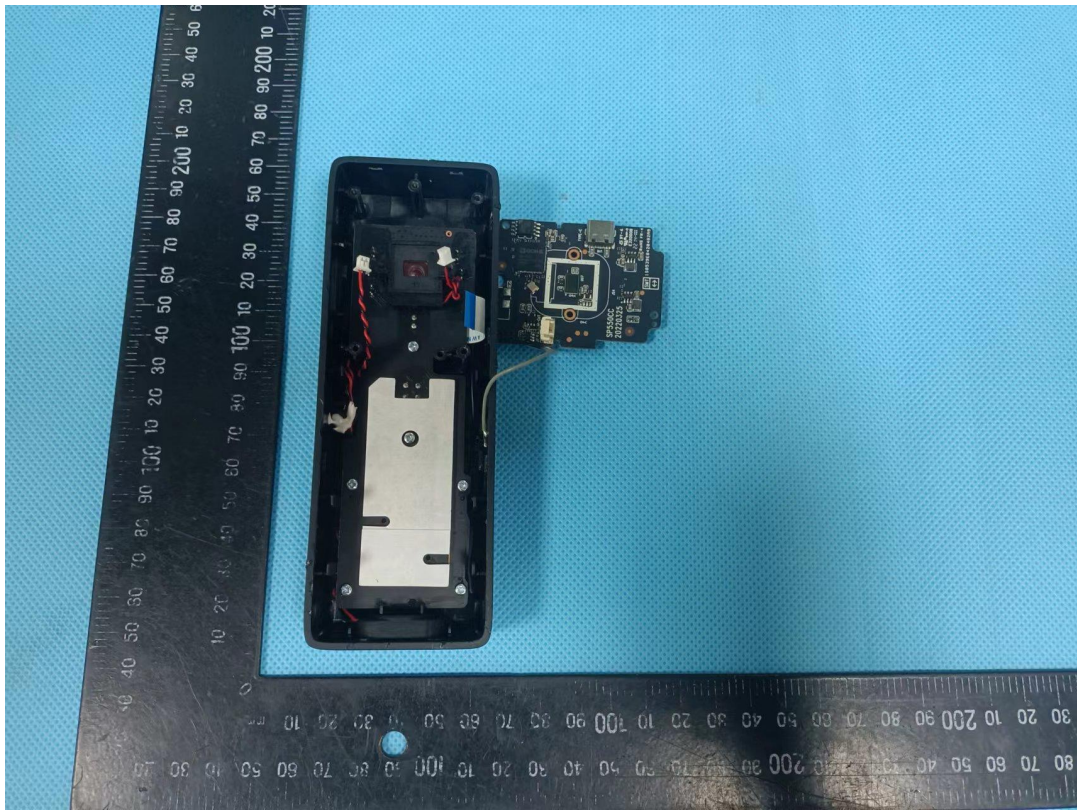


Figure 7 Internal view (For Doorbell)

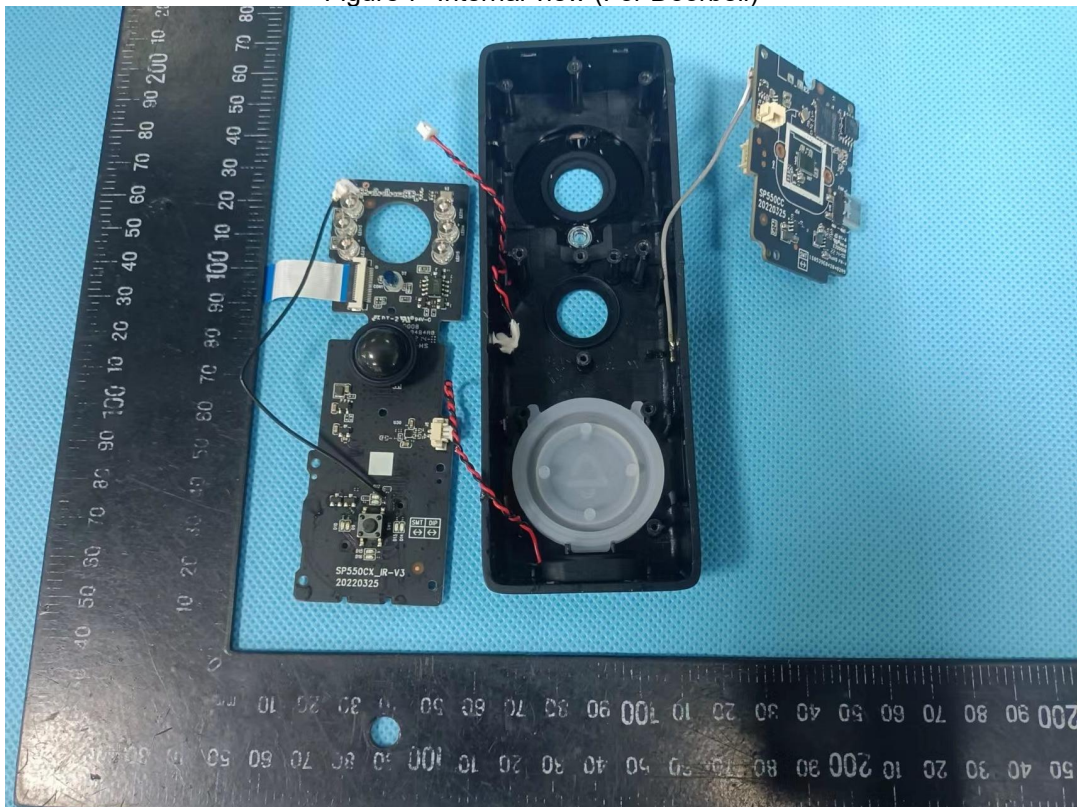


Figure 8 Internal view (For Doorbell)

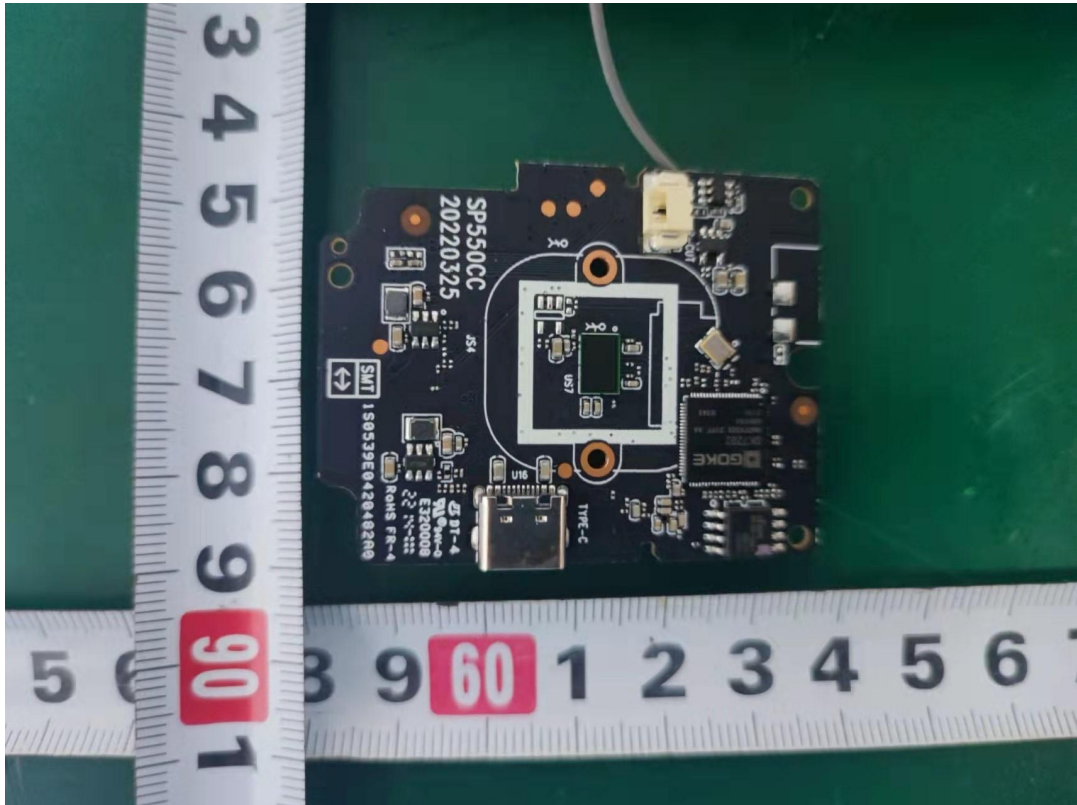


Figure 9 Circuit board view(For Doorbell)

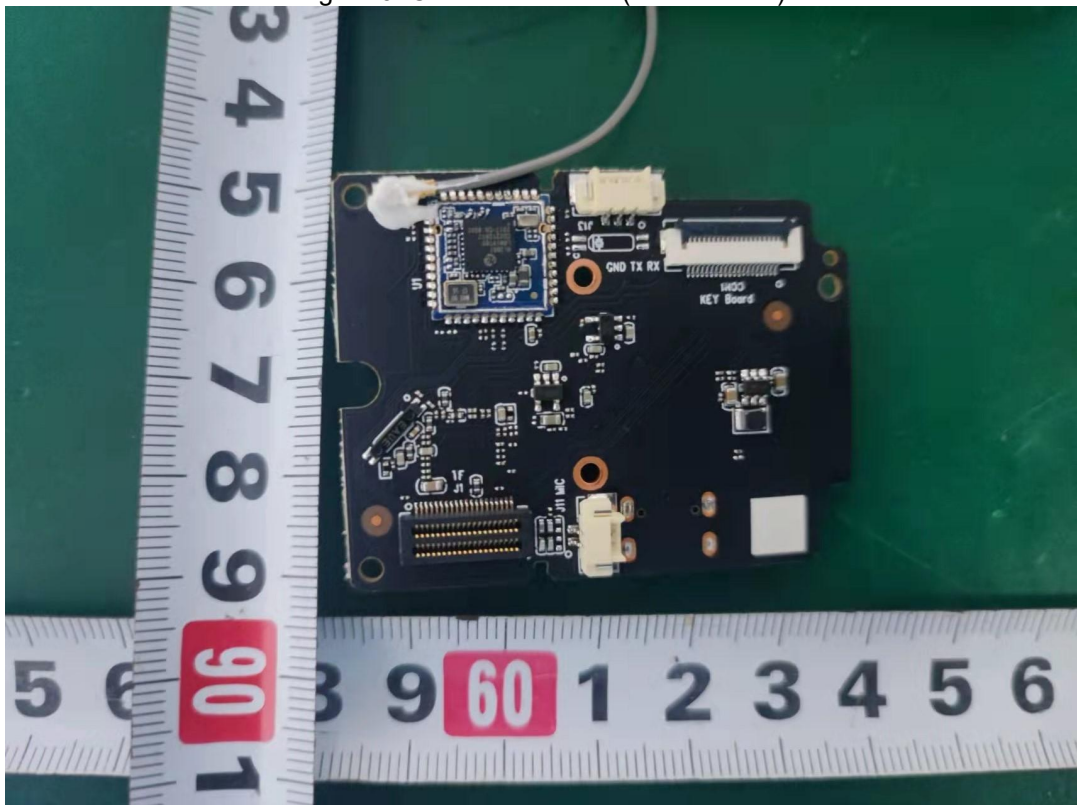


Figure 10 Circuit board view(For Doorbell)

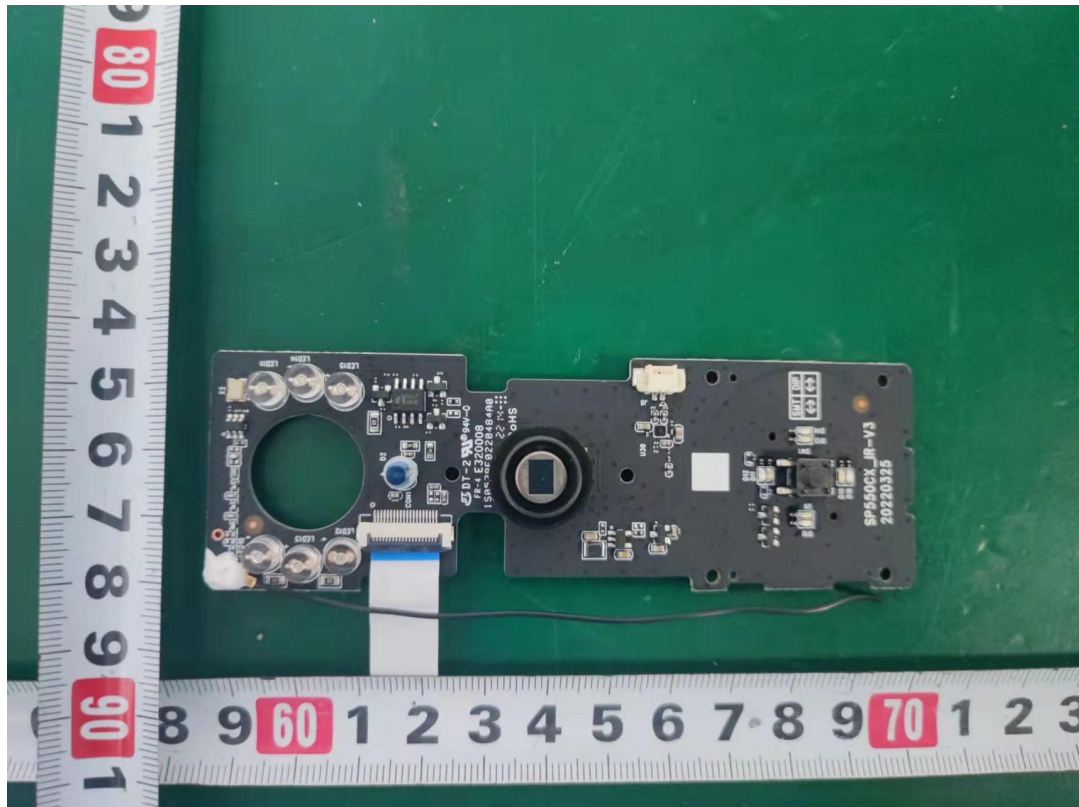


Figure 11 Circuit board view(For Doorbell)

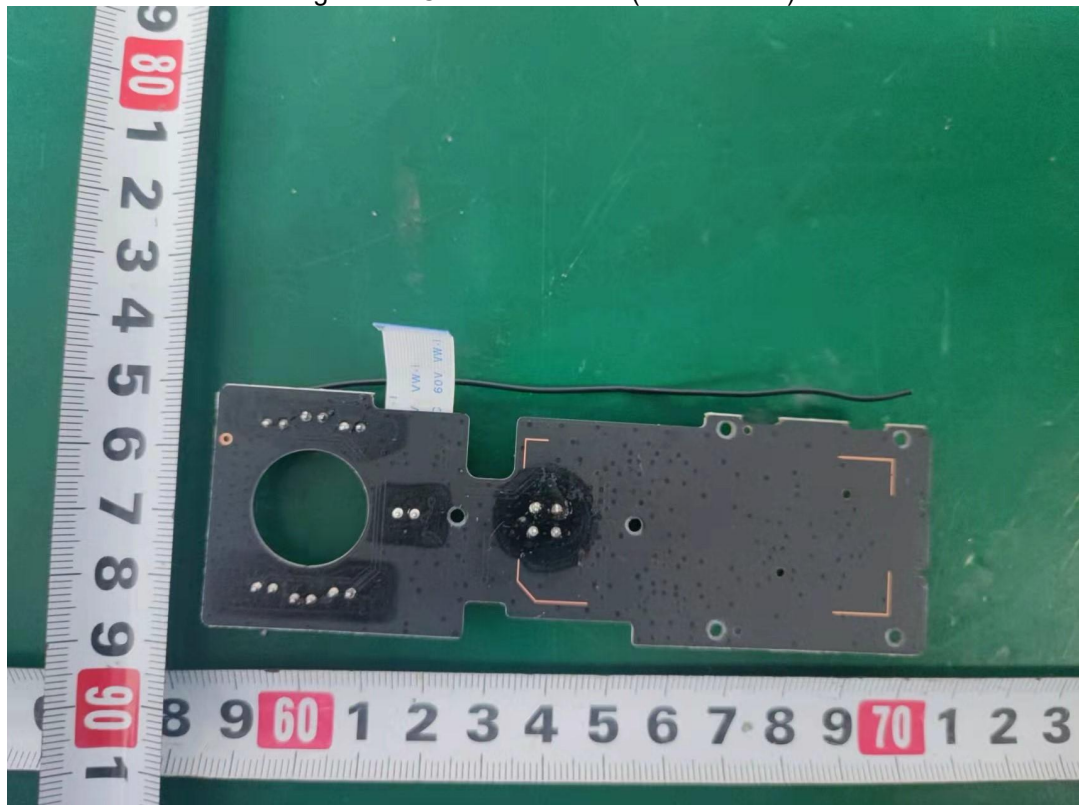


Figure 12 Circuit board view (For Doorbell)

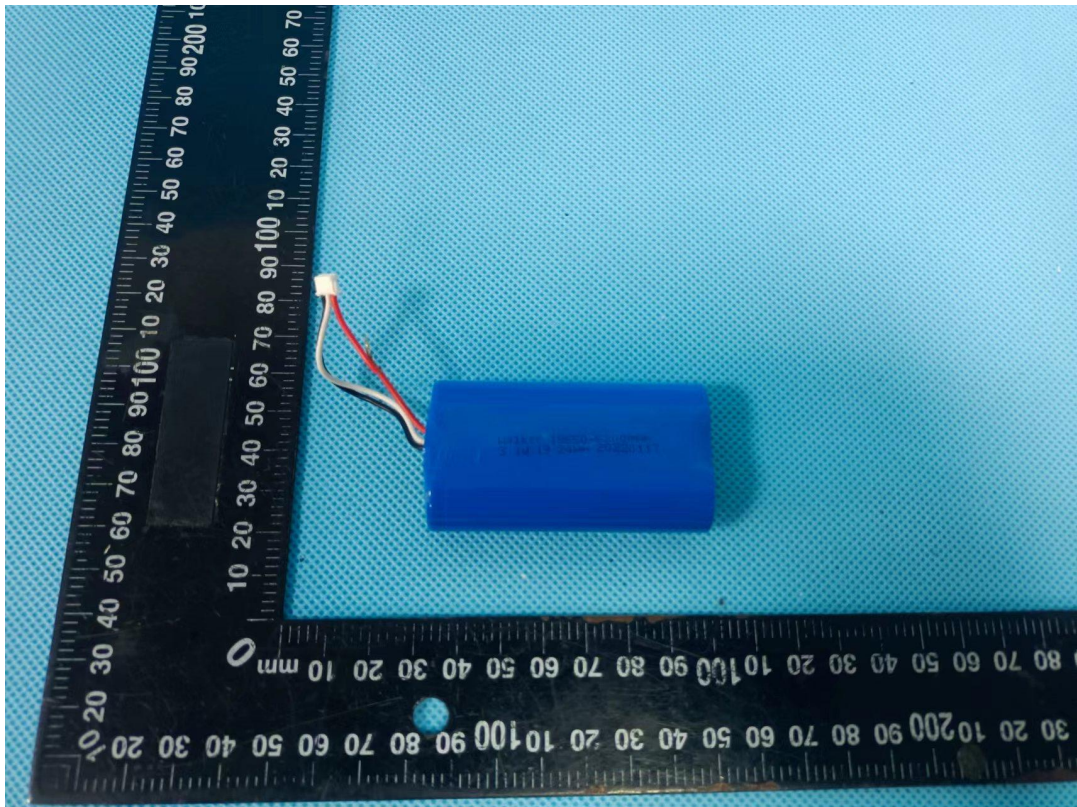


Figure 13 Battery view (For Doorbell)

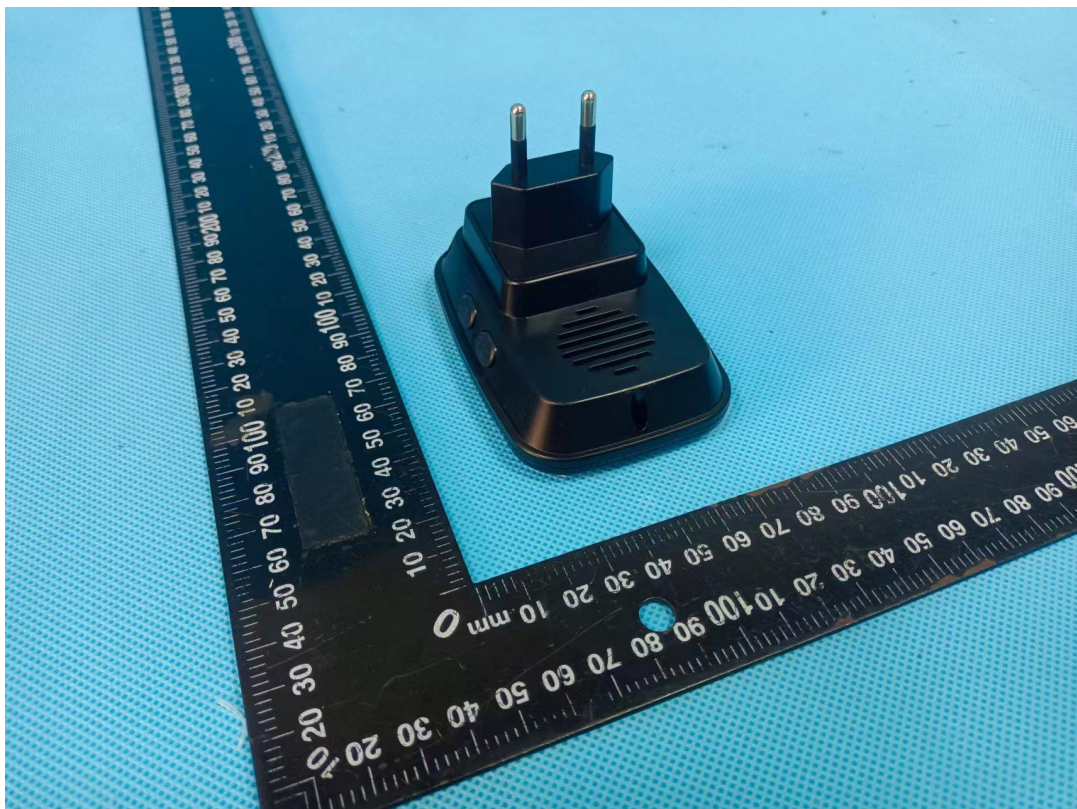


Figure 14 Overall view (For AC plug indoor machine)

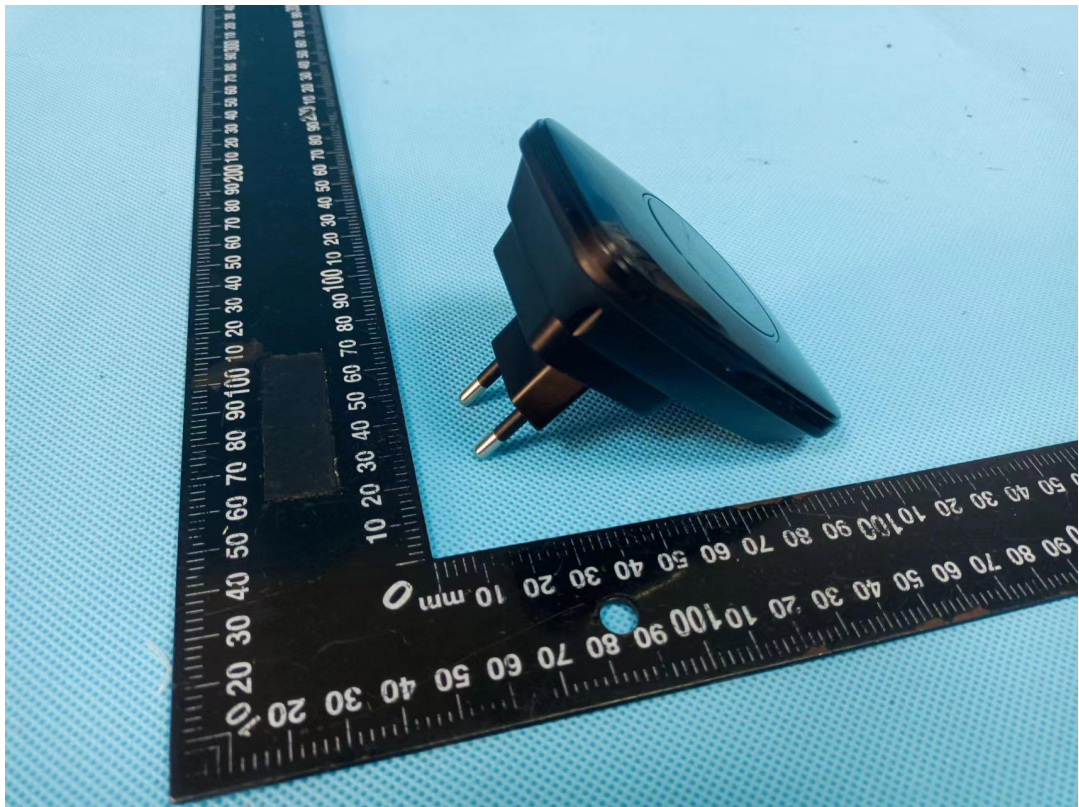


Figure 15 Overall view (For AC plug indoor machine)



Figure 16 Internal view (For AC plug indoor machine)



Figure 17 Overall view (For USB indoor machine)



Figure 18 Overall view (For USB indoor machine)

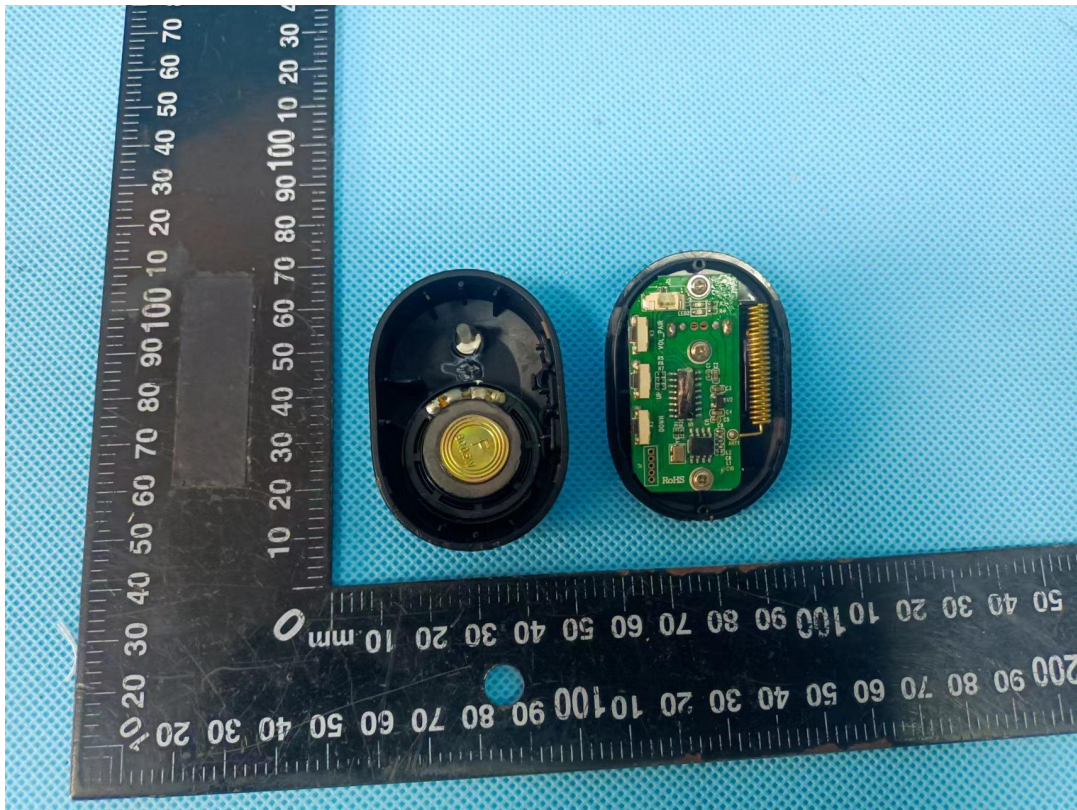


Figure 19 Internal view (For USB indoor machine)

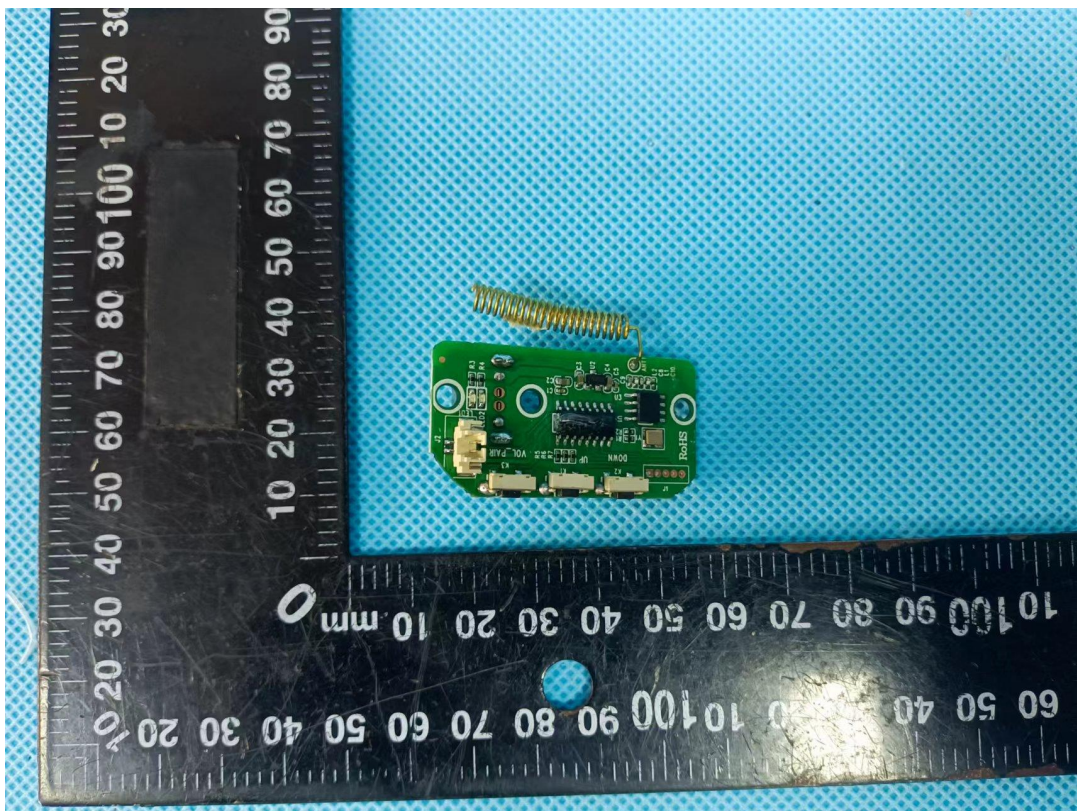


Figure 20 Circuit board view (For USB indoor machine)

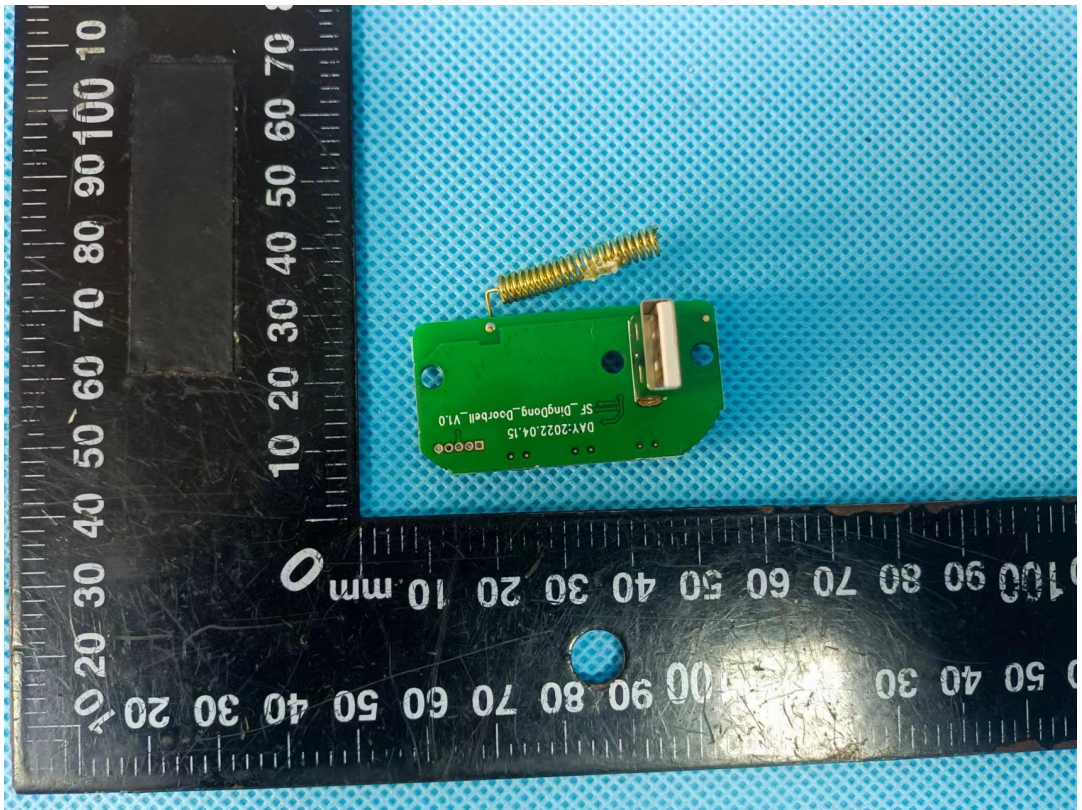


Figure 21 Circuit board view (For USB indoor machine)

6	Marking		P
	Appliances shall be marked as follows:		—
	Rated current in amperes (A)	Refer to marking label of final appliance.	N/A
	Rated Voltage in volts (V)	As above	N/A
	Symbol for nature of supply (~)	As above	N/A
	Name, trade mark or identification mark of manufacturer or responsible vendor	European plug of Adapter models:	P
	Type reference	Incorporated plug portion of adaptor	P

7	Dimensions			P
	Plugs shall comply with EN 50075, Standard Sheet 1			—
	Between two pins (pin base)	18.0 - 19.2 mm	18.00 mm	P
	Between two pins (pin top)	17.0 - 18.0 mm	17.79 mm	P
	Diameter of pin (metallic part)	(4 ±0.06) mm	4.00 mm	P
	Diameter of pin (pin base)	≤ 4.0 mm	4.00 mm	P
	Diameter of pin (middle part)	≤ 3.8 mm	3.80 mm	P
	Pin length	(19 ±0.5) mm	19.00 mm	P
	Length of pin except metal part	(10 +1/-0) mm	10.50 mm	P
	Shape of pin top	Round shape		
	Length of plug base	(35.3 ±0.7) mm	35.60 mm	P
	Width of plug base	(13.7 ±0.7) mm	13.70 mm	P
	Diagonal dimension of plug base	(26.1 ±0.5) mm	26.20 mm	P
	Height of plug projection part	≥ 18 mm	18.00 mm	P
	Angle	45°	45 °	P
	Radius	R 5 -0, +1 mm	5.0 mm	P

Test at 3 samples. For each part of the plug:

—if the measured dimensions of 3 samples are all accord with the limit, fill in the average of 3 measured dimensions.

—If one or more than one of the 3 measured dimensions is not accord with the limit, fill in the most excessive measured dimensions.

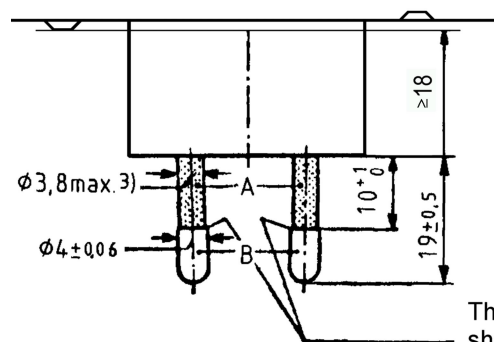
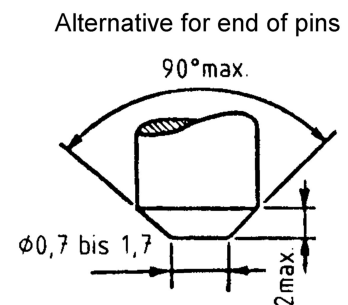
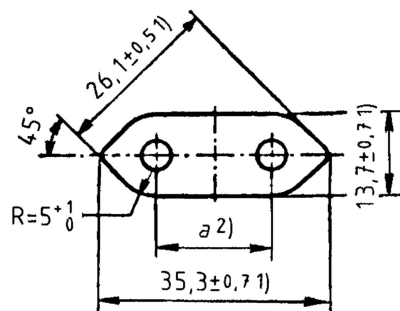
8.	Protection against electric shock		P
8.1	Live parts of the plug not accessible (standard test finger)	Protected by enclosure of the equipment	P

EN 50075 (Partial)			
Clause	Requirement – Test	Result – Remark	Verdict
8.2	No connection between one plug-pin and socket outlet	Checked by gauge of Fig.4	P
8.3	External parts of insulating material	External parts except pins are insulating material.	P
9	Construction		P
9.1	Plugs not replaceable	Not replaceable	P
9.2	Switches, fuses, lampholders not incorporated	Not incorporated	P
9.3	Solid pins	See clause 13	P
	Adequate mechanical strength	As above	P
9.4	Pins locked against rotation	See clause 13.1 and 13.4	P
	Adequate fixed into the body	Each pin shaft is designed with ridges to lock into the pin holder	P
9.5	Kind of connection	Leads are hooked and soldered to the plug pin terminal	P
9.6	Easily to be withdrawn from socket-outlet	The equipment provides sufficient gripping surface	P
10	Resistance to humidity		P
	-Humidity treatment for 48 hours	Tested with the equipment for 120h at 40°C and 95%RH (All material have been considered)	P
11	Insulation resistance and electric strength		P
11.1	Insulation resistance (500 V, min 5 MΩ)	Pins against body: 100MΩ Each pin against body: 100MΩ Pin against Pin: 100MΩ	P
11.2	Electric strength (2,000 V)	Pins against body: 2000V Each pin against body: 2000V Pin against Pin: 2000V	P
13	Mechanical strength		P
13.1	Pressed with 150 N for 5 min	No deformation or deviation from the dimensions of plug portion	P

EN 50075 (Partial)			
Clause	Requirement – Test	Result – Remark	Verdict
13.2	Tumbling barrel according to Figure 8	Weight of sample: 59g 1000 falls was conducted on the plug portion mated with AC Adapter according to DIN VDE 0620-2-1:2013, item 24.2. Three samples tested. After the test, no damage found.	P
	No damages after the test		P
	Requirements of clause 7 and 8.2 still fulfilled	Deformations allowed according to the equipment standard	P
13.3	Rubbing test of plug-pins: 10,000 cycles, 4 N	See test below	P
	No damage of the pins	No visible damage	P
13.4	Pull test at 70°C with 40 N	See test below	P
	Pins not more than 1 mm displaced	Displacement: 0.3mm max.	P
14	Resistance to heat and to ageing		P
14.1	Sufficient resistant to heat	See test below	P
14.1.1	After 1 h in heating cabinet at 100°C no damage shown	No visible damage	P
14.1.2	After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown	No visible damage	P
14.2	Aging test	See test below, all enclosure material have been considered.	P
	- at 70°C for 168h	70°C for 168h applied.	P
	- at room temperature for 96h	96h applied.	P
	No traces of cloth at a force of 5N	Material does not soften	P
	No damage leads to non-compliance	No visible damage	P
15	Current-carrying parts and connections resistance to heat and to ageing		P
15.1	Connections withstand the mechanical stresses occurring in normal use	See below	P
15.2	Contact pressure not through isolating material	Complied	P
15.3	Current carrying parts of copper	Copper content min. 58.0 % No rolled sheet used	P
	No electroplated coating when part is subjected to mechanical wear	No electroplated coating	P
	Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion	No such materials used.	N/A

EN 50075 (Partial)			
Clause	Requirement – Test	Result – Remark	Verdict
16	Creepage distances , clearances and distances through insulation		P
	Live parts of different polarity: 3 mm	>3 mm	P
	Through insulation between live parts and accessible surfaces: 1.5 mm	>1.5 mm	P
17	Resistance of insulating material to abnormal heat and fire		P
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug pin holder with: 750°C. Test was performed for all sources of enclosure material.	P
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion with: 650°C. Test was performed for all sources of enclosure material.	P

Standard Sheet 1



The edges of the metal parts shall be either chamfered or rounded off

A = Insulating collar, B = metal pin

- 1) These dimensions shall not be exceeded within a distance of 18mm from the engagement face of the plug.
- 2) Dimension a is:
 - 18mm to 19.2mm in the plane of the engagement face
 - 17mm to 18mm at the ends of the pins
- 3) This dimension may be increased to 4mm within a distance of 4mm from the engagement face of the plug.